

# GRAIN & FEED JOURNALS

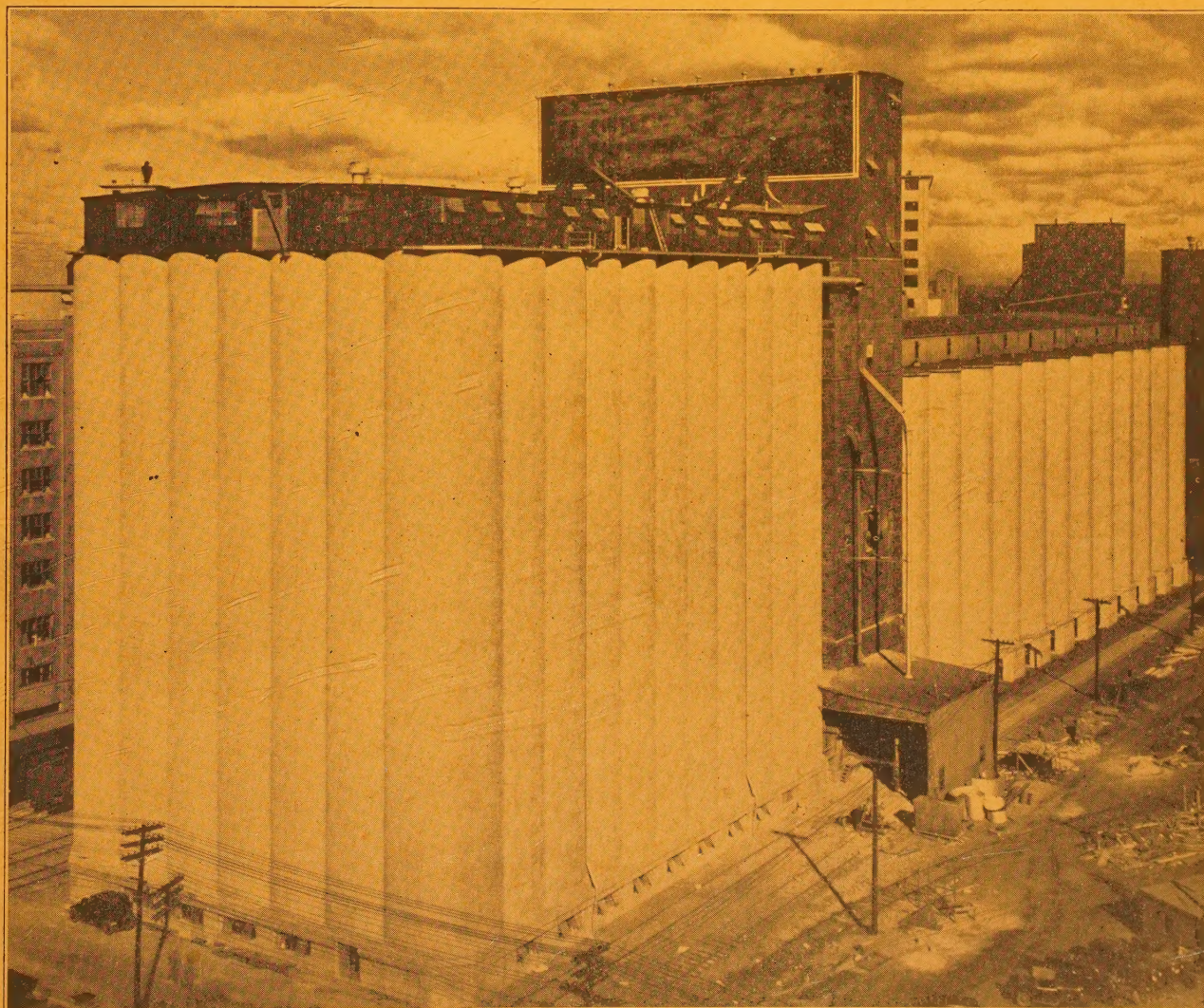
## CONSOLIDATED

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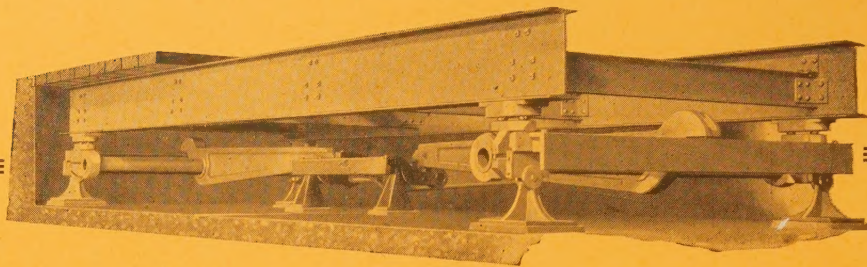
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[For description see page 283]





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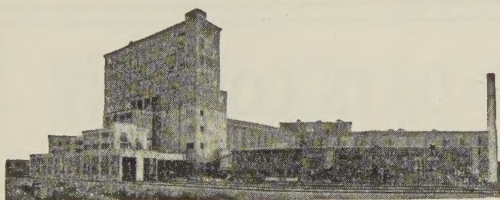
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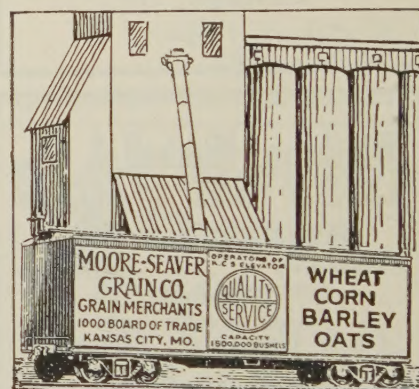
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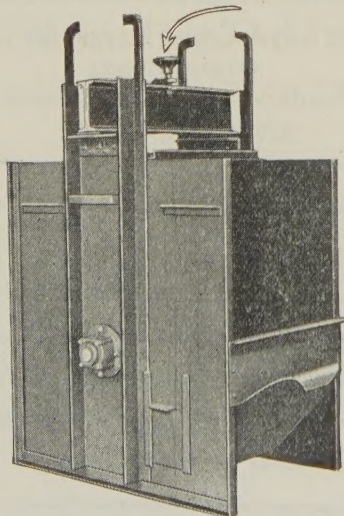
16th Street and Swift Ave.

North Kansas City, Mo.

## THE BEYL AUTOMATIC TAKEUP FOR ELEVATOR BOOTS

Patents Pending

*A New Feature — One Adjustment*



For centering Belt on Pulley turn the hand-wheel and lock in position.

Equipped with Self Aligning Roller Bearings.

Manufactured by

## LINK BELT SUPPLY CO.

Minneapolis, Minn.

## WHAT DO YOU NEED?

to modernize your plant so it will minimize your labor and increase your profits? Is it here?

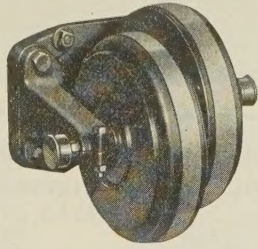
Account Books	Head Drive
Attrition Mill	Leg Backstop
Bag Closing Machine	Lightning Rods
Bags and Burlap	Loading Spout
Bearings { Roller	Magnetic Separator
{ Ball	Manlift
Belting	Moisture Tester
Bin Thermometer	Motor Control
Bin Valves	Mustard Seed Separator
Bleachers and Purifiers	Oat Clipper
Boots	Oat Huller
Buckets	Plans of Grain Elevators
Car Liners	Portable Elevator
Car Loader	Power { Oil Engine
Car { Puller	{ Motors
{ Pusher	Power Shovel
Car Seals	Railroad Claim Books
Cipher Codes	Renewable Fuse
Claim (R. R.) Collection	Rope Drive
Clover Huller	Safety Steel Sash
Coal Conveyor	Sample Envelopes
Corn Cracker	{ Truck
Conveying Machinery	{ Hopper
Distributor	{ Automatic
Dockage Tester	Scale Tickets
Dump	Scarifying Machine
Dust Collector	Screw Conveyor
Dust Protector	Seed Treating { Machine
Elevator Leg	{ Chemicals
Elevator Paint	Separator
Feed Formulas	Sheller
Feed Ingredients	Siding-Roofing { Asbestos
Feed Mixer { Dry	{ Steel or Zinc
{ Molasses	Silent Chain Drive
Feed Mill	Speed Reduction Units
Fire Barrels	Spouting
Fire Extinguishers	Storage Tanks
Friction Clutch	Testing Apparatus
Grain Cleaner	Transmission Machinery
Grain Drier	Waterproofing (Cement)
Grain Tables	Weevil Exterminator
Hammer Mill	Wheat Washer

Draw a line through the supplies wanted, and write us regarding your contemplated improvements or changes. We will place you in communication with reputable firms specializing in what you need, to the end that you will receive information regarding the latest and best.

**INFORMATION BUREAU**

Grain & Feed Journals, 332 So. La Salle St., Chicago





## BUHLER DRIVE will save you hundreds of dollars

and an awful lot of worry.

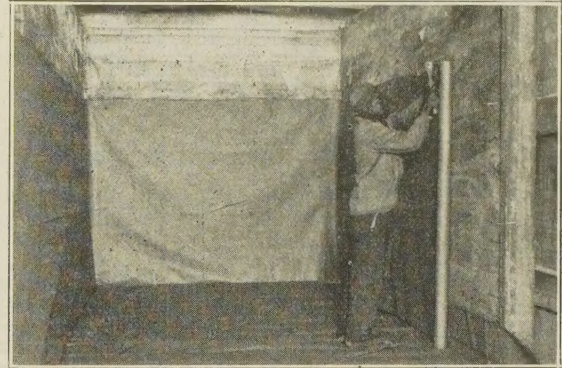
The Buhler Drive takes the place of the usual eccentric shaft eccentrics and connecting rods. And besides oscillating the shoe it counterbalances it too.

May be had for both new and old separators.

*Write for Catalog GD125*

**S. HOWES CO., INC.,**  
INVINCIBLE GRAIN CLEANER CO.  
SILVER CREEK, N. Y.

## H-R One Man Car Liner



Can be installed in five minutes time by one man.

This liner comes in proper size to fit the car—no cutting—no waste. It is made of strong, tough paper which eliminates leakage due to torn paper etc.

Cleaner, stronger, quicker, cheaper and absolutely leak-proof.

*Write for sample and prices.*

**Hummel-Ross Fibre Corp.**

HOPEWELL, VIRGINIA

Also Manufacturers of  
Leak-Proof Grain Door—Permanent and Removable Type

1902 MARCH — APRIL — MAY 1932  
Time for WINDSTORM INSURANCE

Write for the "TRI-STATE SAVING PLAN" for Grain Elevators and other Mercantile Property

Also Residence Property insured against Fire and Windstorm

E. H. Moreland, Secretary Luverne, Minn.

## CONFIRMATION BLANKS

Simple—Complete—Safe

To avoid trade disputes, and differences and prevent expensive errors, use triplicating confirmation blanks. You retain tissue copy, sign original and duplicate and send to customer. He signs and returns one.

This places the entire burden for any misunderstanding of your intentions upon the other party and protects you against expensive misinterpretation of your trades.

Use of these confirmations makes for safer business and surer profits. Spaces provided for recording all essential conditions of each trade.

Fifty confirmations in triplicate, bound with pressboard and wire stitched, size 5½x8".

Order form No. 6 CB. Price 90c at Chicago.

Six Copies to One Address, \$5.00

**GRAIN & FEED JOURNALS**

Consolidated

332 So. La Salle Street

**CHICAGO**

## Place Your Name

and business before the progressive grain elevator men of the entire country by advertising in the Grain & Feed Journals Consolidated. It reaches them twice each month.

## Inland Transportation Insurance

*Do You Transport Stock  
by Truck? or by Rail?*

All hazards of transportation  
should be covered by in-  
surance in the

## MILL MUTUALS

*Write your insurance company  
or agency for particulars  
or address*

**MUTUAL FIRE PREVENTION  
BUREAU**

230 E. Ohio Street

Chicago, Illinois



# GRAIN ELEVATOR BUILDERS

## CHALMERS & BORTON

620 Pioneer Trust Bldg., KANSAS CITY, MO.

**Engineers — Constructors**

Grain Elevators — Feed Mills — Warehouses

*Ask for Quotations on Your Work*

## Industrial Engineering & Construction Co.

**Contracting Engineers**

2730 Grove Street

KANSAS CITY, MISSOURI

Grain Elevators  
Feed Plants

Flour Mills  
Warehouses

Cold Storage Plants  
Industrial Buildings

## Stevens Engineering & Construction Co., Inc.

4121 Forest Park Blvd.

ST. LOUIS, MO.

*Designers and Builders*

**GRAIN ELEVATORS**

Flour and Feed Mills

Warehouses

## WHEN WRITING ADVERTISERS

Mention Grain & Feed Journals Consolidated

## Geo. W. Quick & Sons

Tiskilwa - - - Illinois

*Designers and Builders*

Concrete Grain Elevators

*Waterproof Pits a Specialty*

## CRAMER ELEVATORS

are preferred elevators because each is designed and built to fit the individual needs of the owners.

W. H. Cramer Construction Co.

North Platte, Nebr.

*Plans and Specifications Furnished*

## YOUNGLOVE ENGINEERING CO.

Grain Elevators, Transfer Houses,  
Feed Plants

Wood or Fireproof Construction

418 Iowa Bldg.  
Sioux City, Iowa

Box 1172  
Fargo, N. Dak.

## A. F. Roberts Construction Co.

Sabetha, Kansas

**ERECTS**

**FURNISHES**

Elevators  
Corn Mills  
Warehouses  
Plans  
Estimates  
Machinery

## ROCHELLE & ROCHELLE

*Designers and Builders of*

**GOOD ELEVATORS**

Let us furnish your machinery  
AMARILLO, TEXAS

## Western Engineering Co.

713 Cooper Bldg. Denver, Colo.

Contractors and Builders of  
Grain Elevators that more  
than satisfy the most critical.

## ORA LONG, Garden City, Kansas Builder of Better GRAIN ELEVATORS

## D. G. EIKENBERRY

Builder of Concrete and/or Wood  
Elevators and Feed Mills.

**Modern Grain Handling Machinery**

Box 146

Bloomington, Ill.

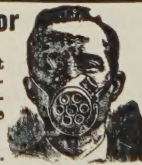
## Cover's Dust Protector

Rubber Protector, \$2.00

Sent postpaid on receipt  
of price; or on trial to re-  
sponsible parties. Has auto-  
matic valve and fine sponge

H. S. COVER

Box 404 South Bend, Ind.



## Ryan Construction Co.

503 Keeline Bldg. OMAHA, NEBR.

**Engineers & Contractors**

Grain Elevators - Feed Mills  
Industrial Buildings

Flour Mills - Cement Plants  
Coal Pockets

## T. E. IBBERSON CO. — Grain Elevator Builders

Feed Mills — Coal Plants — Repairing and Remodeling  
MINNEAPOLIS MINNESOTA

## ZELENY

**Thermometer System**

*Protects Your Grain*

Estimates cheerfully given.

Write us for catalog No. 6.

**Zeleny Thermometer Co.**

542 S. Dearborn St. Chicago, Ill.

## Safety Sample Envelopes

for mailing samples of grain, feed  
and seed. Made of heavy kraft pa-  
per, strong and durable; size, 4½x7  
inches. Have a limited supply to sell  
at \$2.60 per hundred, or in lots of  
500, \$2.30 per hundred, f. o. b. Chi-  
cago.

GRAIN & FEED JOURNALS

Consolidated

332 S. La Salle St., Chicago, Ill.

## Affidavit of Weight (Duplicating)

This form is designed for use in making  
sworn statements of amount of grain loaded  
to substantiate claims for loss of grain in  
transit or when dispute arises. It gives  
practically the same information as Form  
89 SWC with added space for affidavit and  
notary's acknowledgment. Printed on bond  
paper, in black ink, size 5½x8½ inches,  
and bound in books of 50 blanks, perforated,  
and 50 duplicates, with heavy binders board  
bottom and hinged pressboard top, with  
two sheets of carbon. Order Form 7 AW.  
Weight, 8 oz. Price, 75c; three copies  
\$2.00, f. o. b. Chicago.

GRAIN & FEED JOURNALS

Consolidated

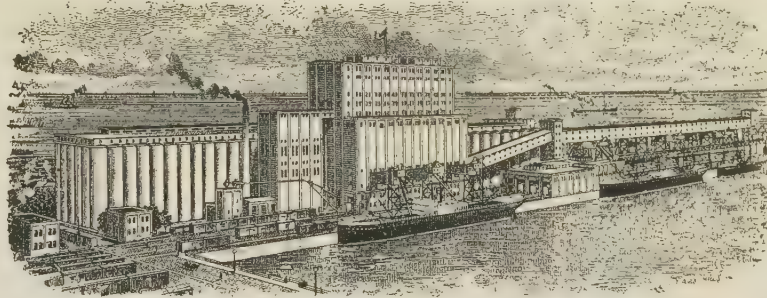
332 S. La Salle St., Chicago, Ill.

If What You Want you see advertised, tell the  
advertiser. If Not—Tell the Journal.

Morton, Ill.—I have gone thru the  
sample copy of Grain & Feed Journals  
you sent us, and find it contains a great  
many interesting items. Am enclosing  
a check, for which place me on your  
mailing list for one year.—Joseph  
Hauter, mgr., Farmers Grain & Live  
Stock Co.



Capacity  
5,000,000  
Bushels



Equipped with  
Four Stewart  
Link-Belt  
Grain Car  
Unloaders

PENNSYLVANIA RAILROAD ELEVATOR AT BALTIMORE

## JAMES STEWART CORPORATION

W. R. SINKS,  
PRESIDENT  
Phone Harrison 8884

ENGINEERS AND CONTRACTORS  
FISHER BUILDING—343 S. DEARBORN ST., CHICAGO, ILLINOIS

H. G. ONSTAD  
VICE-PRES.-GEN'L MGR



## GALVESTON WHARF COMPANY'S NEW ELEVATOR "B"

Capacity 6,000,000 Bushels

This Elevator Designed and Construction  
Supervised by

## HORNER & WYATT

Consulting Engineers to the Grain Trade  
470 Board of Trade Kansas City, Mo.



## Santa Fe Elevator "A"

Kansas City, Kans.

Capacity  
10,500,000 Bushels

## John S. Metcalf Co.,

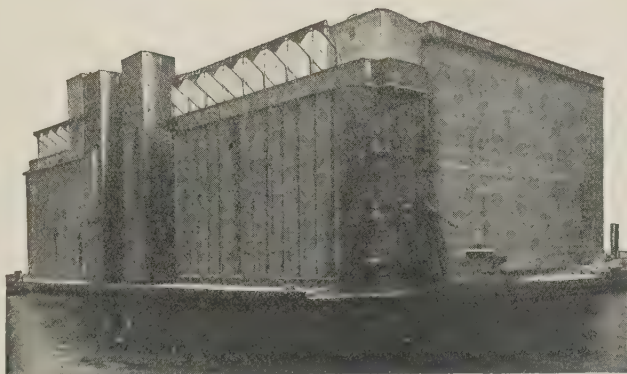
Grain Elevator Engineers and Constructors

105 W. Adams St., Chicago

460 St. Helen St., Montreal

17 Dartmouth Street, London, England

837 W. Hastings St., Vancouver, B. C.



## International Milling Co.

Buffalo, N. Y.

Capacity 5,000,000 Bushels

Designed and Built by Us in  
Four Periods of Construction

Jones-Hettelsater Construction Co.

Grain Elevators, Flour and Feed Mills

600 Mutual Bldg.

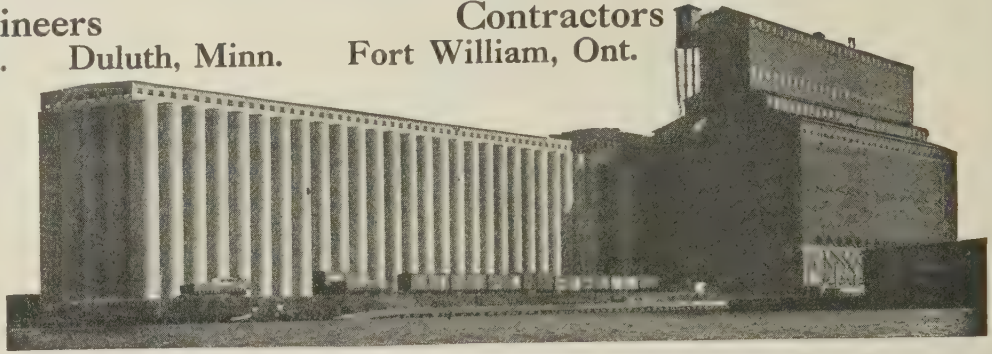
Kansas City, Mo.



# The Barnett and Record Co.

Engineers  
Minneapolis, Minn.      Duluth, Minn.      Contractors  
Fort William, Ont.

Designed and Built  
this 3,000,000 Bushel  
Grain Storage Annex  
to Great Northern  
Elevator "S"  
Superior, Wis.



## Elevator Boot

Ball Bearing, Low Intake, Non-chokeable, Automatic Takeups, 20" Diameter Pulley, Large Capacity.

*Use Rubber Covered Cup Belt—It Pays*

**WHITE ★ STAR ★ COMPANY**

Wichita, Kansas

Headquarters for  
GOOD ELEVATOR EQUIPMENT

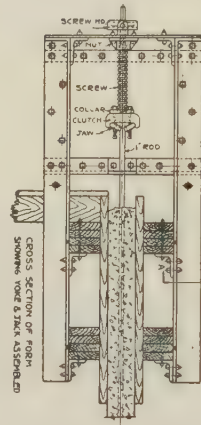


**SELL or RENT  
Form Lifting**

## JACKS

Grain Elevators, Silo  
Coal Pit Construction  
Blue Prints Furnished

**Nelson Machine Co.**  
Waukegan, Illinois



## Grain Shipping Record Books

**Record of Cars Shipped.** This form enables country shippers to keep a complete record of each car of grain shipped from any station, or to any firm. It has the following column headings: Date Sold, Date Shipped, Car Number, Initials, To Whom Sold, Destination, Grain, Grade Sold, Their Inspection, Discount, Amount Freight, Our Weight Bushels, Destination Bushels, Over, Short, Price, Amount Freight, Other Charges, Remarks. The book contains 80 double pages of ledger paper, size 9½x12 inches, and has spaces for recording 2,320 carloads. Well bound in heavy cloth with keratol back and corners. Shipping weight, 2½ lbs. Order Form No. 385. Price \$3.00.

**Sales, Shipments and Returns.** Is designed to save time and prevent errors. The pages are used double. The left hand pages are ruled for information regarding "Sales" and "Shipments"; the right hand for "Returns". The column headings enable you to make complete records for each transaction. The book contains 80 double pages, and index of ledger paper, size 10½x16 inches, will accommodate records for 2,200 cars. Bound in heavy canvas with keratol corners. Shipping weight, 3½ lbs. Order Form 14AA. Price \$3.75.

**Grain Shipping Ledger** for keeping a complete record of the shipments of 5,000 cars. Facing pages are given to each firm to whom you ship and page is indexed. This book contains 80 double pages of ledger paper with 16-page index, size, 10½x15½ inches, well bound with cloth covers and keratol back and corners. Shipping weight, 4 lbs. Order Form No. 24. Price, \$4.25.

**Shippers Record Book.** This book is designed to save labor in handling grain shipping accounts and gives a complete record of each car shipped. Its 80 double pages of ledger paper, size 9½x12 inches, provide spaces for 2,320 carloads. Wide columns provide for the complete record of all important facts of such transactions under their respective heads. Bound in heavy cloth with keratol back and corners. Shipping weight, 2½ lbs. Order Form 20. Price \$3.00.

## Grain & Feed Journals

CONSOLIDATED

332 South La Salle St., Chicago, Ill.

## Grain Receiving Record Books

**Grain Receiving Register.** One of the best forms for recording wagon loads of grain received. It contains 200 pages, size 8½x13½ inches, ledger paper, capacity for 3,200 wagon loads. Bound in canvas. Some enter load records as received, others assign a page to each customer, while others assign pages to different kinds of grain. Bound in strong board covers, canvas back. Headings of 11 cols. are: "Date, Name, Kind of Grain, Gross, Tare, Net, Bushels, Pounds, Price, Amount, Remarks." Shipping weight, 2½ lbs. Order Form 12AA. Price \$3.00.

**Wagon Loads Received** has columns headed: "Month, Day, Name, Kind, Gross and Tare, Net Pounds, Bushels, Pounds, Price, Dollars and Cents, Remarks." It has 200 pages, size 9½x12 inches, and room for 4,000 loads. Printed on linen ledger paper, with strong cloth covers and keratol corners and back. Shipping weight, 2 lbs. Order Form 280. Price \$3.00.

**Receiving and Stock Book.** Many dealers prefer to keep each kind of grain received from farmers in separate columns so each day's receipts may be easily totaled. This book is designed for this purpose. It contains 200 pages, size 9½x12 inches, and will accommodate 4,000 loads. Well bound in black cloth and keratol back and corners. Shipping weight, 2½ lbs. Order Form 321. Price \$3.00.

**Grain Receiving Ledger** is an indexed book especially adapted for keeping individual accounts with farmer patrons. Each page is 8½x13½ inches, numbered and ruled for 44 entries. Ledger paper and well bound in cloth with keratol back and corners. 224 pages. Shipping weight, 3 lbs. Order Form 43. Price, \$3.50.

Form No. 43 XX contains double the number of pages. Shipping weight 4½ lbs. Price, \$5.50.

**Grain Scale Book** is designed to assign separate pages to each customer and their names can be indexed so their accounts can be quickly located. It contains 252 numbered pages, of high grade linen ledger paper. Each page is 10½x15½ inches, will accommodate 41 wagon loads and it has a 23-page index. Well bound with cloth and keratol back and corners. Shipping weight, 4½ lbs. Order Form 23. Price, \$4.75.

## Grain & Feed Journals

CONSOLIDATED

332 South La Salle St., Chicago, Ill.



# Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

## ELEVATORS FOR SALE

**KANSAS**—Six elevators for sale. Address 67X9, Grain & Feed Journals, Chicago, Ill.

**SOUTH CENTRAL IOWA**—Line of six elevators for sale at a bargain. Good grain territory. O. A. Talbott, Keokuk, Iowa.

**CENTRAL SOUTH DAKOTA**—20,000 bus. elytr. for sale in live town; only house; built 1931. Strictly modern. Box 1233, Huron, S. D.

**INDIANA**—Four Grain Elevators for sale to settle estate. 12, 15, 20 and 25,000 bu. capacity. Will price separately. Well located. Write J. D. Higbee, Elwood, Ind.

**MICHIGAN**—Three elevators for sale in central part of state, with bean, feed, seed and fuel business. One also handles lumber and builders' supplies. Saginaw Milling Company, Saginaw, Michigan.

**NO. ILL.**—Elevator, lumber, coal business, etc., for sale, with residence. Ogle Co. No trade; sell cheap for cash or bankable notes to close estate. Good opportunity. Holcomb-Dutton Lumber Co., Sycamore, Ill.

**WYOMING**—25,000 bus. capac. elev. and \$50,000 to \$75,000 annual feed bus., for sale. Loc. in heart of No. Platte Valley; no trades; must be part or all cash. Other interests reason for selling. Box C, Torrington, Wyo.

**N. E. OKLA.**—Elevator and feed business for sale, elec. power, complete feed equipment. County seat town. Good dairy and poultry community. Sacrifice price, account age. Must sell. Write 68F8 Grain & Feed Journals, Chicago.

**ILLINOIS**—One-half interest in 20,000 bu. elevator also good mill and other business for sale. 50 miles west of Chicago. Run 15 yrs. at a profit—a profit even in 1931. One partner retiring. \$5,000 cash balance terms. P. O. Box 94, Hinckley, Illinois.

**KANSAS** Elevator practically sold after three insertions. Here's what the advertiser writes: "We enclose check for three insertions of our ad. We have had more than a dozen inquiries from our ad and believe that we will be able to effect a sale." This proves conclusively the value of a Journal Want-Ad.

**MINNESOTA** cleaning and transfer elevator for sale; 130,000 bushels; three track scales; good cleaning machinery; electric power good condition. Excellent transit location; fine dairy territory. Bargain easy terms payment. Write 66B6, Grain & Feed Journals Consolidated, Chicago, Illinois.

**BARGAIN IF TAKEN AT ONCE**—Some one is always looking for an elevator at a good grain point and reads these ads just like you're doing now, so if you wish to dispose of your present property, enlarge your present interests, or embark in the grain business, USE these columns to your best advantage just as others are doing. WE WILL assist you in the composition of copy free. We are in business to be of service to YOU. There is no wrong time to put an ad in the columns of the Journal. TRY IT.

## ELEVATOR, GENERAL FEED AND SEED BUSINESS

**CENTRAL OHIO**—Grain elevator, general feed and seed business for sale, coal bins, plenty of trackage. Good farming district. Box 312, Ashley, Ohio.

## ELEVATOR BROKERS

WE BUY AND SELL Elevators, Feed and Flour Mill Plants or Unit Machines. H. C. Davis Mill Machinery, Bonner Springs, Kansas.

**ALWAYS HAVE ELEVATORS** for sale. To save time, please state amount you wish to invest and location you prefer. James M. McGuire, 6440 Minerva Ave., Chicago, Ill.

**NO NEED FOR FORMALITIES**—You don't need an introduction to Journal Want-Ads. They will help you without, whatever your problems may be.

## ELEVATORS WANTED

**IF YOU DO NOT** find the elevator you want advertised, place your wants in the "Elevators Wanted" section and you will receive full particulars regarding many desirable properties not yet advertised.

## ELEVATOR WANTED TO LEASE

**WANT TO BUY OR LEASE** Elevator in Kansas. Write 68E3, Grain & Feed Journals, Chicago.

**WANT TO LEASE** Central or Western Kansas elevator. Write 68F4 Grain & Feed Journals Consolidated, Chicago, Ill.

**WANT TO LEASE** Elevator in good grain territory in Ill. or Ind., preferably Ill. Elevator must be in good condition and priced right. Write 68C10 Grain & Feed Journals, Chicago.

## MILL & ELEVATOR FOR SALE

**TEXAS**—Mill and Elevator for sale at Wellington, Tex. Mill, elevator, coal, grain and feed business. Splendid location. Most reasonable terms to right parties. For full particulars write to Singley Bros., Lubbock, Tex.

**STOP! READ! THINK!** One advertiser writes, "Your service brought me 24 replies." We can do the same for you. Don't wait, write now"

## FLOUR MILL FOR SALE

**NORTH CAROLINA**—900-bbl. 5-story brick flour mill for sale, fully equipped with Nordyke-Marmon machinery, excellent condition. 110,000 bus. storage; electric power; sprinklered. Full description upon request. W. E. Webb, Receiver, Statesville, N. C.

## SAMPLE ENVELOPES

**SAMPLE ENVELOPES—SPEAR SAFETY**—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches. Have limited supply to sell at \$2.60 per hundred or in lots of 500, \$2.30 per hundred f. o. b. Chicago. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

## MILLS FOR SALE

**OHIO**—Brick mill for sale; slate roof; 40x60; all equipment; 5 miles south of Dayton, Ohio. No mill or feed store near. Mrs. Amanda Heeter, R. R. No. 11, Box 59, Dayton, Ohio.

**MICHIGAN**—Due to illness, have good small mill for sale. Now running every day with efficient help. Modern in every way. Did \$45,000 business last year, nets up to \$5,000 per year. No incumbrance. For information, write Box 62, Lawrence, Mich.

## MILL WANTED TO RENT

**WANT TO RENT**—Small custom mill in good farming section. C. H. Edwards, 112 Oakdale St., Royal Oak, Mich.

## BUSINESS OPPORTUNITIES

**NO. ILL.**—Steady paying lumber, coal yard, etc., for sale. Safe income, staple stock. Cash to close estate. Grain elevator near can be rented cheap. Investment buildings small. Holcomb-Dutton Lumber Co., Sycamore, Ill.

**SOUTHWESTERN IOWA**—Controlling interest in grain, feed and oil business for sale in town of 1,500. Earned 30% net last year. Sell for \$12,000 with payment of \$5,000. Write W. M. Knutson, Lock Box H, Chicago, Ill.

**CALIFORNIA**—This is not a bargain but an opportunity for one to buy a money making business at its actual worth. Mfrs. of poultry and dairy feeds, grain milling, feeds and seeds. Address Box 187, Holtville, Calif.

## Bargain Sale in Soiled and Shelf Worn Books

Improved Railroad Claim Blanks require little of your time for filing, and contain spaces for all the necessary information in the order which assures prompt attention on the part of the claim agent. They increase and hasten your returns by helping you to prove your claims and by helping the claim agent to justify payment. Are printed on bond paper, bound in books, each containing 100 originals and 100 duplicates, with two-page index, instructions and summary, with four sheets of carbon. The original is sent to the claim agent, and carbon copy remains in the book, as a record of your claim. Sells for \$2. Have few loosely bound and soiled, one at \$1, four at \$1.25 and two at \$1.50. Order 411-E (overcharge in freight or weight) "Special."

Clark's Double Indexed Car Receiver's Register gives ready reference to the record of any car. Facing pages 11x16 inches of heavy ledger paper are each ruled into five columns, those on the left being numbered 0, 1, 2, 3 and 4, while columns on the right are numbered 5, 6, 7, 8 and 9. Each column is ruled into three distinct divisions with the following sub-headings: "Initial," "Car No." and "Record." The marginal index figure which is repeated in upper corner of each right hand page represents the right hand or unit figure of the number entered, while the column heading is the second or tens figure. The required number can be instantly found if properly entered. Form 40, with space for 12,000 cars, sells new for \$2.50, and Form 42, with space for 21,600 cars, \$3.25. Have two pretty badly soiled Form 40 "Special" for \$2.

All prices are f. o. b. Chicago.

GRAIN & FEED JOURNALS Consolidated  
332 South LaSalle St. Chicago, Ill.



### FIELD AND GRASS SEED FOR SALE

**SOYBEANS**—Carloads or bag lots choice seed direct from grower. Send for samples and delivered prices. Lee Huey Seed Company, Plymouth, Illinois.

**WHEN YOU** want field or grass seed, write us, and we will put you in communication with nearby dealers, who have what you seek. The service is free. Information Bureau, Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

**WE CARRY STOCKS** verified origin clover, common alfalfa, also state certified and tagged Grimm. All hardy Western grown at convenient distributing points and solicit your inquiry. Occidental Seed Co., Salt Lake City, Utah.

### MOTORS FOR SALE ELECTRICAL MACHINERY

Large stock of motors and generators, A. C. and D. C., new and rebuilt, at attractive prices. Special bargains in hammermill motors 30 to 60 h.p., 1200 and 1800 r.p.m. Write for stock list and prices. Expert repair service. V. M. Nussbaum & Company, Fort Wayne, Ind.

**DYNAMOS AND MOTORS WANTED**—Buyers of this equipment are reached in largest numbers and at the least expense through the use of the "DYNAMO-MOTORS" columns of Grain & Feed Journals—the medium for power bargains.

### HELP WANTED

**COMPETENT AND EXPERIENCED** elevator managers, foremen, bookkeepers, auditors, second men and solicitors can easily and quickly be found through an ad in the "Help Wanted" column of the Grain & Feed Journals, Consolidated, Chicago, Ill.

### SITUATION WANTED

**WANT POSITION** as manager of country elevator; 25 yrs. exper.; can handle sidelines. Address 68C11 Grain & Feed Journals, Chicago, Ill.

**POSITION WANTED** as elevator manager, married, thoroughly experienced in all sidelines, good bank and other references. Reason for change, lease expired. Write 68F3 Grain & Feed Journals Consolidated, Chicago, Ill.

### SCALES FOR SALE

**SECOND HAND** scales for sale of any make, size or price, always find ready buyers when represented in the "Scales for Sale" columns of GRAIN & FEED JOURNALS Consolidated.

### ENGINE FOR SALE

**ANY KIND, ANY SIZE, ANY PRICE** engine, which is not in use, and which you wish to sell, will find many ready buyers if advertised in the "Engines For Sale" column of GRAIN & FEED JOURNALS. Try it.

## Duplicating Wagon Load Receiving Book

Hauler	Cross	Tare	Net

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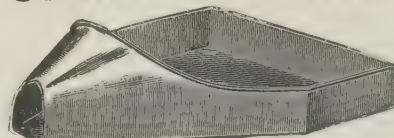
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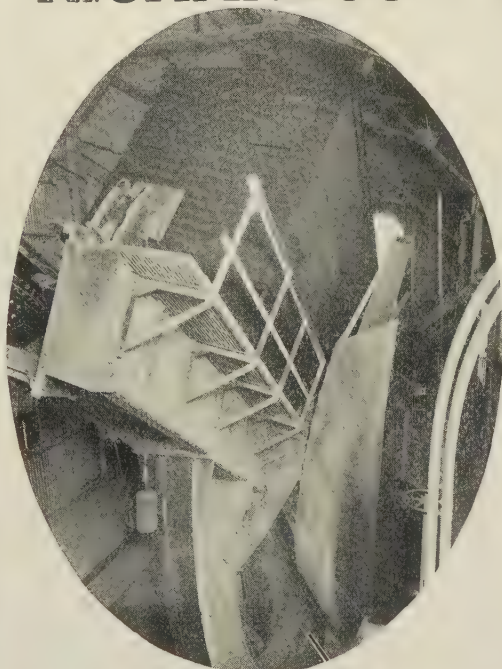
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# GRAIN & FEED JOURNALS

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Charles S. Clark, Manager

A merger of

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**LETTERS** on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

**QUERIES** for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, MARCH 23, 1932

**RELUCTANCE** of the Senate to investigate the Federal Farm Board should not discourage farmers and merchants from demanding a thoroughgoing inquiry.

**IT IS** announced that there will be no amendments to the Canada Grain Act at the present session of the House of Commons. Will the Congress of the United States please copy.

**THE INDIANA** elevator company that won a favorable verdict in court against the corn borer bureaucrats will be congratulated by other shippers who have been pestered by quarantine enforcement agents.

**FAILURE** of only ten banks, while five reopened during the past week, reflects an improved condition that will enable the draft insurance companies to continue the reasonable rates in effect for this protection.

**FEEDING** government wheat to live stock thru the medium of the Red Cross should be a God-send to the Farm Board as a convenient method of getting rid of wheat that has gone out of condition.

**INCREASING** the license fees of heavy commercial trucks and busses will force them to make more equitable contributions to the road maintenance fund and place a heavy handicap upon the portable mills.

**SO MANY** thefts by midnight marauders are reported in this number it would seem imperative that elevator men avoid leaving anything of value in their elevator or office unless it is securely locked.

**IT IS** time for you to write, wire or phone your representatives in Congress to refuse to give the Farm Board any more money and to investigate its misuse of the "revolving fund" to depress the farmers' market. Do it NOW.

**PREFERENCE** for proceeds of drafts collected by insolvent banks is the crying need of the grain and feed shipper, and it is hoped the bill just introduced by Rep. Shepard will make more progress than did the Strong bill.

**THE ACTIVITIES** of county agents in merchandising various commodities used on the farm is contrary to the federal law providing for contributions to their employment. Merchants in all lines are reporting such offenders and discouraging future contributions to their pay.

**GOVERNMENT** in business lost \$1,600,000,000 operating the railroads for 32 months, \$3,000,000,000 in the merchant marine, \$70,000,000 in the Alaska railroad and \$500,000,000 in the Farm Board. When will taxpayers awake to the necessity of discharging the army of bureaucrats.

**RECEIVERS** of banks are offering some real bargains in country elevators, and a sheriff's sale disposed of one recently at less than half the amount of the fire insurance, so many attractive opportunities await dealers of experience, who have cash or credit at their command.

**SO MANY** barn fires have been traced direct to portable mills recently that all fire insurance companies insuring farm buildings are voiding policies where property is visited by the portable mill. One of the late fires was in a barn near Stronghurst, Illinois. A backfire of the engine caused the gas tank to blow up and burn the barn.

**CROP PROGNOSTICATORS** who have been suffering from the grasshopper scare find much consolation in the recent cold snaps and the alternating freezes and thaws. Real winter weather always results in the killing of hordes of insect pests, so the late freeze has been most welcome in many grain growing districts.

**PROTEIN** tests are not a part of the official grading system, but since some state inspection departments make protein determinations it is highly desirable that the certified percentages be uniform on the same carload, as planned by the Kansas department, which is taking steps to standardize the protein testing equipment in use at the several inspection points.

**HOW** many more ill-starred ventures like the soy bean pool must the Illinois Farm Bureau back with members' dues before it realizes the folly of attempts to control prices.

**GRAIN** elevator operators who may have received one of the pamphlets sent broadcast over Illinois by the College of Agriculture advocating bisulfid of carbon for exterminating weevil are reminded that use of the explosive voids all fire insurance policies.

**SUPPORTERS** of government interference in the commodity trades are diminishing in numbers in the halls of Congress since it has become obvious that the half billion dollars voted has been expended without benefit. Another potent factor working against the Farm Board is that members of Congress have no voice in naming the recipients of the princely salaries.

**ILLINOIS** elevator men will be pleased to know that thieves who have been stealing cloverseed from Fulton County elevators have been arrested and some of the seed recovered. Three farmers who had knowledge of the value of the seed were the thieves and, no doubt, are firmly convinced that they are in great need of more farm relief.

**SPECULATION** in cash grain is a clumsy and costly proceeding, as the Farm Board seems to have discovered, for it wisely exchanged some 5,000,000 bus. of wheat in Kansas City elevators for the December future. If the Stabilization Corporation will follow this by divorcing itself entirely from the cash grain business and confining its manipulations to the future markets the wheat growers will be gratified.

**IF CONGRESS** would give all of the wheat now held by the Farm Board to the starving Chinese a fair price could be obtained for the enormous stocks now held back on the farms and no U. S. citizen need go hungry. Crucifying United States producers just to provide easy berths for farm agitators is no longer to be tolerated and wise farmers are rapidly rising against the sap suckers.

**PLUGGING** cars with low grade grain is not the accepted method of working off the poor stuff, the cases reported by the Department of Agriculture at Minneapolis and Milwaukee being the work of tyros or accidental. Grain men of experience will not hazard grading down the entire carload by the discovery of a little low grade grain; they prefer to mix thoroly, so that the sampler can not help getting a fair sample.

**FLAT BOTTOMED** bins are so difficult to empty and to keep clean, careless workmen often help to increase the number of plugged cars by failing to clean out the bins. Dust and chaff left in these bins provides a pleasant breeding cache for weevil. Most elevator operators who have tolerated the flat bottomed bin have found it costs more to use them than it would to install hopper bottoms in all their bins.



BIGGER cars meant a more profitable business for the railroad companies. In pursuance of this policy the roads have been scrapping the old cars of small size and building no new ones, until small cars are a rarity. Minimum weights also have been shoved up in disregard of shippers' convenience. As a reward for this dictatorial policy the rails are losing much business to the motor trucks to which small shipments are most welcome.

GRAIN SHIPPERS could render a valuable service to their fellow shippers by reporting to us all cars seen leaking grain in transit. Publication of the essential is given free in every case where shipper reports initials, car number, date, kind of grain leaking, direction of train and part of car leaking. You would like to have other shippers report your car when seen leaking and you can encourage them to do so by reporting theirs.

AN OREGON feed mill which has been paying an exorbitant rental for a building site on railroad right-of-way will soon be moved to the center of town on its own site, because it no longer ships its products by rail, in fact it gets all of its raw material and ships the finished products by trucks. The railroads have been so exacting in the matter of leasing sites for industries on their right-of-way, truck competition may force them to be more reasonable.

ONE OF the encouraging signs of the times is that grain merchants in different parts of the land are taking an active interest in government and seeking office in hope of reducing taxes and also reducing government's interference with business. The political racketeers who for the last twenty-five years have been spending the tax payers' money ruthlessly and hobbling business with many unnecessary regulations and restrictions, should be relegated to the junk pile.

IF THE Farm Board stores its 182,000,000 bus. of surplus wheat in Europe, Congress would not be likely to turn the balance over to charity. The question uppermost in the minds of the Farm Relief Racketeers is "How Can We Get Our Wheat Beyond Congressional Control?" And the pressing problem before Congress is "How Can We Prevent the Complete Destruction of the Farmers' Markets?" Why is the head of the Stabilization Corporation going to Europe?

## A Creed

To be always seeking and trying  
to find

The Good that is somewhere in  
all mankind.

FARMERS everywhere will be glad to join the Farmers Nat'l Protective Ass'n in its petition for the repeal of the Agricultural Marketing Act. The Secretary of the Association, Mr. G. W. Robertson, of Atwood, Ill., is obtaining many signers and surely merits the earnest support of every grain grower. Until the Farm Board's surpluses as well as the Farm Board are driven from the markets, higher prices cannot be expected.

LANDLORDS and tenants are only too eager to drag the responsible grain dealer into their renting squabbles, so it is with pleasure we read of a landlord who directed his tenant to haul the grain to a bin on a neighboring farm instead of to the elevator in town, and now the tenant refuses to haul it farther, contending that delivery as ordered was sufficient. Landlord and tenant are appealing to the circuit court, but the local grain dealer, happily, is paying none of the court costs and not worrying over the result.

CONTRACTORS are so eager to get their construction crews out in the field they are taking contracts at figures way below what seems to be possible even at reduced costs of materials. Fortunate indeed is the dealer who can afford to build a new elevator now and take advantage of the low prices of materials and the lower wages. However, it would be well to have definite plans drawn of the proposed house and full specifications provided before the structure is started, otherwise both contractor and owner will be surprised by the finished structure and disappointed with the cost.

THE MARKET NEWS SERVICE of the Bureau of Agricultural Economics, duplicates the market reports of the different press associations, which are supplemented by telegraph, telephone, radio, daily market reports and many market letters, is of no value to the merchants engaged in different lines of trade, nor is it of value to the producers who have access to earlier and more reliable information published in newspapers everywhere. Each trade in grain is posted on black-boards throughout the land long before the Bureau knows of it. The expense of distributing market news so far as it relates to grain is pure waste.

THE LOSSES incurred by the Government's barge service must be met by the taxpayers, and it should not be overlooked that many private carriers competing with the Government are also being taxed to support this venture of the Government into business. Like all other Government ventures, the barge service rendered by the Government costs much more than the transportation charges collected. Such competition is unfair and should be abolished. It is not the proper province of Government to serve in any capacity, but wherever a service has been undertaken by Government, it makes for waste, inefficiency and extravagance.

## Farm Relief That Would Be Most Helpful

Originally the Department of Agriculture was started primarily for the purpose of helping farmers of the United States to better methods of production. Throughout the years the Department has ventured into so many new activities it has gone far astray from its original purpose.

If Congress would discontinue all appropriations for the collection and compilation of information regarding farm stocks of grain and livestock the buyers of the world would not be given much information regarding the ability or intentions of the United States producers to market more grain and livestock. The large stocks of grain reported by the Department as of March 1, have surely helped to depress the markets and thereby injured the producers who are holding. The farm reserves combined with the large stocks held by the Farm Board will continue to depress prices until a great reduction is effected in the visible supply.

Congress, profiting by the coffee burning practices of the Brazilian Government, seems to recognize the depressing influence of the Farm Board's surplus stocks but hesitates to force further reduction in its stocks. Manufacturers have long pursued a hand to mouth policy and bought only wheat needed to fill orders because they are in continual fear of dumping by the Farm Board hence many buyers are kept out of the farmers' market. Until these large stocks are dissipated and the Farm Board forbidden to buy any more, the markets will sag. A complete crop failure would restore normal wheat prices in North America but nobody wants it. When producers generally recognize the depressing influence of the Farm Board's large stocks they will call upon Congress to abolish the Board and order its holdings marketed immediately.

The large stocks of the Canadian Wheat Pool, which long depressed the world's markets, are being gradually marketed without broadcasting the various transactions to the world. The Farm Board's stocks could be reduced as quickly if sale was entrusted to American exporters. When these two misguided, impractical schemes for holding up the consumers of the world have been terminated and the markets relieved of the accumulated surplus stocks, prices will again assume normal conditions governed by supply and demand.

The racketeers who sought to bid defiance to economic laws have done more injury to the cause of the wheat growers of North America than all other factors combined and the sooner the surplus stocks are dissipated and the racketeers driven from the markets, the sooner will the wheat grower prosper again. The people at large as well as the wheat producers of Canada and the United States have come to recognize the folly of attempting to boost the price of wheat through pooling methods.



### Taking Advantage of the Labor and Material Markets

A most promising feature of the present low prices in the material and labor markets is that country grain dealers are disposed to build better houses. Recently we have received photographs of several new modern up-to-the-minute reinforced concrete elevators of much larger capacity than is generally erected at the average country station. In Nebraska last week complete plans and specifications for a modern wood elevator were given to the contractors to bid on.

So many country elevators are in a badly run down condition there should be unusual activity in bringing these facilities up-to-date and putting them in condition to handle the new crop efficiently. Country elevator men as a rule recognize that they will be called upon to handle not only the new crop but a large portion of the old crop, which is still back on the farms.

Improvements can be made now at so much less than the cost prevailing heretofore, elevator men generally would profit by taking advantage of the low scale of wages now prevailing and make needed improvements so as to be in prime condition to handle the new crop when it starts to move.

### Why Not Have the Farm Board Investigated?

Evidence of a return of confidence on the part of foreign wheat buyers, and market sentiment would be more cheerful if it were not for the colossal stocks of wheat and cotton held by the Farm Board. As long as these supplies hang over the market, prospective buyers of farmers products will be cautious and hesitant. No real recovery in grain prices is likely until the Farm Board is eliminated and its stocks of wheat and cotton sold.

On Febr. 1st, 1932, Senator Norris of Nebraska, introduced a resolution in the Senate, providing for a joint congressional investigation of the Farm Board and of the Grain Trade. Nothing has been heard of this resolution since it was introduced, and reports continue to come from Washington to the effect that,

They say, "Sufficient facts were brought out in the hearing before the Senate Committee on Agriculture and Forestry held Nov. 24 to 28, 1931, that no further investigation is necessary."

They say, "The Grain Trade fears an investigation if it is to be included, and is working against it."

The investigation is necessary if the public is to be informed of the actual effect of Farm Board operations upon American agriculture—upon private business. Every farmer and men in all lines of business are interested in knowing just what the Farm Board has done—what it has accomplished, and what it expects to accomplish.

Every patriotic citizen should write his or her Senator and Congressman and ask them what they are going to do about the investigation of the Farm Board. If you don't attend to your own business—nobody else will!

### Recommendation by Wheat Advisory Board

The recommendation Mar. 22 by the Wheat Advisory Board of the Farm Board, having control of wheat stabilization operations, that the government's holdings of wheat be disposed of is a confession that the whole scheme of price elevation has been a failure from the beginning.

The Advisory Board's suggestion that the wheat be sold abroad in countries not hitherto importing American wheat sounds well but ignores the fact that increasing the supply of an international commodity in any country has its repercussions in every wheat growing and consuming country.

Diversion of the funds of the Reconstruction Finance Corporation from urgent domestic needs to finance long credits to foreign concerns for the purchase of Farm Board wheat is an even more distasteful suggestion by the Advisory Board. The wheat will be eaten long before the loan falls due, and it is difficult to collect pay after the article purchased has been consumed. The probability is that such loans never will be repaid, and the American taxpayer will have to bear the burden, just as repudiation of foreign war debts by euphemistically designated moratoriums and cancellations is unloading Europe's burden on our citizens.

### Distribution of Seed Lists

Undoubtedly there is justification for the distributing of seed lists to elevators in the drouth areas, showing where supplies of seed may be obtained. Inspection of such seed is likewise commendable in the interests of maintaining the quality of the crops that are grown to rebuild stricken areas.

Such is the case in Nebraska, where 200,000 bus. of seed grains are now listed for farmers of the drouth area in the north part of the state by the agricultural college service. One list is that of the Nebraska Crop Growers Ass'n, made up of a group of Nebraska farmers who produce certified seed from stock originating at the State Experiment Station; the other is made up of the names of farmers with surpluses, compiled with the help of newspapers, radio stations, county agents and others. Copies of these lists have been sent to elevators and committees in drouth sections.

Similar efforts have been expended in South Dakota, North Dakota and other drouth regions. There is not a grain dealer in the country who would not help suffering farmers to get a fresh start.

But no justification can be found for such practices in sections of the country that are not suffering. An example is Wisconsin, where county agents are being utilized to distribute free lists showing stocks of certified seed growers, manifestly a plan to obtain free advertising for the products of the members of the Wisconsin Experiment Ass'n.

Even less is there justification for such activities as those indulged by Howard M. Gore, Commissioner of the Department of

Agriculture of West Virginia, who publishes semi-monthly a "Market Bulletin," wherein he gives free listing of all articles for sale or wanted limited only to "West Virginia farms, farm products or farm machinery, owned by farmers." Two outstanding points about the bulletin are "All listings . . . are without charge," and "No subscription is charged."

Such activities as those carried on in Wisconsin and West Virginia can only be classed as interference with legitimate business all the way from wholesaler to dealer and have no justification as in the drouth regions. Departments of Agriculture that carry on commercial activities should suffer drastic punishment. Unfortunately nothing more severe exists for them than the vote of the taxpayers who pay the bills.

### Bondsmen Not Liable Prior to Issuance of Warehouseman's Permit

Joe Asenbauer operated the 16,000-bu. mill elevator at Herreid, S. D., in 1925 and 1926, and for several months before Apr. 20, 1926, received grain for which he issued scale tickets, altho he had not up to that date filed a bond qualifying himself to accept grain for storage, and he so informed the farmers hauling grain to the elevator.

He filed a bond Apr. 20 and on May 4 the railroad commission issued a certificate authorizing him to store grain; and he then issued warehouse receipts, dating them back to time of receipt of the grain.

On Oct. 21, 1926, holders of receipts tendered the storage charges and demanded their grain. Asenbauer informed them that he was "broke" and could not deliver the grain either at the elevator or at the terminal market.

Suit was brot on the bond in the circuit court of Campbell County, but this decision was reversed in favor of the bondsmen by the Supreme Court of South Dakota Jan. 25, 1932, saying:

Was there an actual delivery of grain to the warehouse after a permit to store grain was issued by the railroad commission, which would justify the issuance of the storage receipts and obligate the sureties upon the bond? We are of the opinion that the evidence will not sustain an affirmative answer to that question. There is no evidence in the record that at the time the permit was issued, there was in fact any grain of any kind or character or quality in the elevator or in the possession of the defendant Asenbauer. There is no evidence that Asenbauer retained, either in the elevator or at any other point, the grain actually delivered to him, and for which these storage receipts were issued. Asenbauer testified: "Practically all of the grain for which I issued storage tickets was received at my elevator at Herreid before August 1, 1925." The grain being received before August 1, 1925, and the permit not being issued until April 20, 1926, dispels any presumption that Asenbauer had the actual grain in his possession at the time the permit was issued.

Under the terms of the bond, the sureties obligate themselves only for liability arising due to the fact that there has been issued to the principal a permit to store grain. They are not liable for some act of the principal which occurred before a permit was issued. It is apparent from the reading and wording of the first bond that it is not within the contemplation of the bond that there should be any liability upon the sureties for any act of the warehouseman at a time when he had no permit from the railroad commissioners to accept and receive grain for storage. The bond was given to enable the principal to receive a permit, and it is only when the principal acts under a permit that any liability under the terms of the bond is contemplated.—*Vojta et al. v. Delbert, et al.* 240 N. W. Rep. 332.



## Asked—Answered

[Readers who fail to find trade information desired should send query for free publication here. The experience of your brother dealers is worth consulting. Replies to queries are solicited.]

### Cost of Elevator Construction?

*Grain & Feed Journals:* We have an old iron-clad elevator building and, in an endeavor to reduce the amount of insurance carried on this building to present levels, have conflicted with the ideas of the insurance companies on the 90 per cent co-insurance clause.

The insurance companies have suggested that we obtain the average replacement per cubic foot for iron-clad elevators in our locality, which they will use in computing reproduction costs and coverage under the 90 per cent co-insurance clause.

How can we obtain the present cost per cubic foot of iron-clad grain elevator construction?—Champion Milling & Grain Co., J. A. Robinson, accountant, Clinton, Ia.

### Soya Bran

*Grain & Feed Journals:* Can you give me any information regarding Soya Bran? I understand it is a by-product from soy beans and is used as a food for children.—Miss Gillock, Gillock Grain Co., Cleburne, Tex.

**Ans.:** Soya bran is the coarser parts of soy beans, obtained from aspirating soy beans, consisting principally of hulls which have rubbed off in the course of handling.

Recently interested institutions have begun experiments with the product in hopes of developing new outlets for the divisions of the milled products of soy beans. Developments have not been completed to the point where they have been made public.

Soya bran is available from most of the large producers of soy bean products, of which there are a number.

### Buyer Liable After Failure of Bank?

*Grain & Feed Journals:* We shipped a car of oats to Burlington, Ia., and made draft as instructed thru the First Iowa State Trust & Savings Bank, which failed while its draft on New York bank was in transit, and our draft was returned unpaid. Who bears the loss?—Illinois Grain Co.

**Ans.:** Buyer has made himself liable by specifying that draft should be made thru the bank that failed, thus virtually constituting the bank its agent for the payment of the draft.

*Grain & Feed Journals:* Referring to the foregoing I wonder if you are familiar with the case of Marland Refining Co. v. Penn Soo Oil Co., 222 N. W. 594, which holds exactly to the contrary.

We happen to be the other party in interest in the Burlington item referred to, and we do not admit liability.—C. D. Sturtevant, pres. Trans-Mississippi Grain Co., Omaha, Neb.

**Ans.:** It is true that the Marland Refining Co., case is a parallel, and, if accepted as a precedent, would give a decision in favor of buyer of car of oats. But there are other decisions to the contrary. Among them are Virginia-Carolina Chemical Co. v. Steen, 55 So. 47; Rivers v. House, 234 S. W. 641; Sutherland v. Bank, 31 Mich. 230; Smith v. Mills, 230 Pac. 350; and Harryman v. Bowlin, 4 Pac. Rep. (2d) 1011. This latter was published in the Grain & Feed Journals Jan. 13, page 18, and is a parallel case, decided in favor of the seller, by the Supreme Court of Oklahoma Sept. 15, 1931.

The Marland Refining case was decided Dec. 20, 1928, before bank failures became so numerous. At present the courts seem disposed to place the responsibility on the buyer who indicates what bank the seller should use in collecting the draft. But for such request a seller may have made collection thru

other and solvent banks or thru the Railway Express Agency and avoided loss. The decisions in favor of seller rest on the principle that the buyer, by designating the bank thru which draft was to be made, made the bank its agent, and not the agent of the seller, as would be the case had buyer given no instructions.

### Condition of Farm Board Wheat?

*Grain & Feed Journals:* Is there any way the Farm Board can be compelled to make a statement of the amount of good and bad wheat it has and take all bad wheat out of the visible supply statement.

I am told that at Schneider, Ind., they have 370,000 bus. of wheat stored that will not make good chicken feed; also at Mt. Carmel, Ill., over 200,000 bus. If all was checked up there may be 50 per cent of the Farm Board wheat in this condition. Deduction of this unsalable wheat may help prices for the farmer.—Kennedy Bros., Templeton, Ind.

### Exterior Elevator Leg or Pneumatic Elevator?

*Grain & Feed Journals:* We are undecided whether to erect a grain leg on the outside of our plant at Miles City or to elevate the grain by air. If we use cups and belt it will necessitate the building of a large cupola. If air could be used the old cupola would serve the purpose. Most of the blowers we have seen have cracked the grain.—Wm. O'Loughlin, Baker, Mont.

**Ans.:** The cracking of grain by pneumatic grain handlers is quite common with this equipment and while many of these plants have been installed in this country, most of them have been abandoned.

Steel leg casings have been used in a number of places for supplementing the elevating facilities by erecting such housings for the cup belt along the outside wall of elevators and raising the head high enough above the bins to pipe to any bin desired. While it would be far preferable to have this extra leg on the inside of the elevator its need might be avoided thru the replacing of the present leg with a leg of double its capacity.

Country elevators are installing larger receiving and elevating facilities in order to expedite the removal of grain dumped from the large trucks. If the capacity of the one leg was doubled or tripled it would save a lot of time for the operator when engaged in shipping as well as when receiving.

### Measure of Damages for Breach of Contract?

*Grain & Feed Journals:* Have not the courts decided that a claimant can not recover for market loss beyond that in effect at expiration of contract?—S. W. Douthitt, New Castle, Pa.

**Ans.:** Speaking accurately it is not the expiration but the date of breach of contract that governs the market price at which loss is settled. Usually, however, it is discovered at time of expiration of contract, or soon after, the delivery will not be made.

The Supreme Court of Oklahoma, in Consolidated Flour Mills Co. v. Wright, 267 Pac. 464, held: The measure of damages recoverable against a vendee, for failure to receive and pay for personal property contracted for, is the difference between the contract price and the reasonable market value of the personal property at the time of the breach. A provision of a contract, which undertakes to fix a penalty as liquidated damages for the breach of a contract for failure to receive and pay for personal property as contracted for, is void, if the actual damages which may be suffered by the seller thru the

breach of the contract are susceptible of proof.

### Activities of County Agents?

*Grain & Feed Journals:* In two or three of our counties the county agents are responsible for shipping in commodities and furnishing them to farmers at actual cost. Is there any way we can head this off at Washington?—E. J. Smiley, sec'y Kansas Grain Dealers Ass'n, Topeka, Kan.

**Ans.:** The county agents are teachers, and they are expected to confine their official activities to instruction, and not to engage in trade.

Under the Smith-Lever Act, controlling county agents the sec'y of agriculture, in 1922, said "Extension agents may not act as organizers of farmers ass'ns, conduct membership campaigns, edit organization publications, engage in commercial activities, act as financial or business agents, nor take part in the work of any individual farmer. They are expected to make available to organizations such information as may be helpful to them."

When any county agent is overstepping his lawful field the facts should be given to the Director of Extension Work at Washington, Mr. C. W. Warburton, who will endeavor to point out to the agent his proper sphere of activity or cut him off the public payroll.

### Taxation of Grain in Store

*Grain & Feed Journals:* Is elevator owner who has grain stored in his elevator and hedged in Chicago liable for taxes?

We think we noticed somewhere that grain hedged was considered as being in transit and elevator owner not liable for taxes, is that right?—Henry C. Woodyard Grain Co., Oscar Jones, manager, Chrisman, Ill.

**Ans.:** The Bartlett-Frazier Co. of Chicago won a suit against the assessor of Will County, Illinois, who undertook to assess 232,000 bus. of grain stored in one of the firm's elevators at Joliet, Ill., many years ago. The court sustained the firm's contention that the grain was in transit and not taxable, in a decision Jan. 16, 1902.

Later, however, the question was threshed out in the Supreme Court of Illinois by E. R. Bacon, of Chicago, who carried an appeal to the Supreme Court of the United States, the outcome being that the grain must be in motion to be exempt from local taxation.

Bacon had the grain in the Wabash Elevator at Chicago for the purpose of inspecting, weighing, cleaning, clipping, drying, sacking, grading or mixing; and had contracts with the railroad companies for transportation to New York or Philadelphia. The Supreme Court of the United States, in a decision rendered Feb. 24, 1913, ruled that the grain was subject to local assessment, while actually in his private grain elevator. His intentions as to subsequent movement of the grain were not controlling.

A similar decision was given by the Supreme Court of Minnesota in the case of the Northwestern Elevator Co., Minneapolis, May 31, 1907; and by the Supreme Court of Wisconsin in the case of the Globe Elevator Co., Superior, 114 N. W. Rep. 441.

The hedge is a contract to deliver the grain elsewhere at a future time and does not affect the present status of the grain for the purpose of taxation.



Elevator at Arthur, N. D., moved away from Annex by Derailed Train.  
[See facing page.]



## Exterminating Weevil in Sacked Feed?

**Grain & Feed Journals:** We have about 100 sacks, or five tons, of hominy feed which is badly infested with weevil. We have tried twice to destroy them but both times were unsuccessful. We have this feed in a small building, 10 by 12 ft., by 7 ft. high. This building is a good distance from the elevator, and there would be no danger from fire. How can we positively kill these bugs?—C. V. Martin.

**Ans.:** The failure may be due to several causes. Perhaps the exposure was not continued a long enough time for the gas to penetrate to the center of the sacks. Or the temperature may have been too low for carbon bisulfid to be effective. Or the fumigant may have leaked out thru openings.

Chloropicrin is deadly to insects but not poisonous to man. It is not inflammable and is not explosive. It is sold under the trade name "Larvacide" in liquid form, giving off a gas.

The use of ethylene oxide as a fumigant is described elsewhere in this number.

### How To Use Carbon Bisulfid

Bisulfid of carbon is easy to use, but the policies of the mutual companies contain a clause, "This policy shall be void if the assured does now, or hereafter keep, use or allow bisulphid of carbon in any of the buildings described in this policy."

For carbon bisulfid treatment first clean the bin thoroly, sweeping the sides and remove all refuse. Make the bin as air-tight as possible. Then pour bisulfid of carbon on top of the wheat in the bin and as it evaporates the heavy vapor will sink thru the grain and kill the insects. The gas is poisonous and the operator should avoid breathing it. All fire and naked lights must be kept away as the gas is very explosive when mixed with air, so that after using, the elevator should be aired thoroly before entering. About  $1\frac{1}{2}$  lbs. per thousand cubic feet should be sufficient.

The bisulfid is much more effective in hot weather than in winter. The use of a greater quantity in cold weather does not help much. The liquid or the vapor does not injure the grain in any way for germination or for human food.

### How To Use Hydrocyanic Acid Gas

Hydrocyanic acid gas is one of the most deadly poisons known to medical men. A person inhaling one breath would not live long enough to take a second breath. All precautions must be taken to keep away from the rooms or buildings in which the gas is employed.

The gas is generated by placing cyanide of potassium (KCN) in sulfuric acid ( $H_2SO_4$ ). The cyanogen (CN) which is poisonous combines with the hydrogen (H) of the acid to form the gas HCN. The chemical reaction is the simplest and all preparations are directed to distribution of the gas and the safeguarding of the life of the operator.

The quantity required is  $\frac{1}{4}$  gramme of cyanide per cubic foot of space to be fumigated. A 10x10x10 ft. room containing 1,000 cu. ft. will require 250 grammes. As there are 28.35 grammes to the ounce, divide this by 28.35 to reduce to ounces, giving 8  $\frac{1}{2}$  oz. For each ounce of cyanide allow  $1\frac{1}{2}$  times as many ounces of acid, liquid measure. Allow  $1\frac{1}{2}$  ounces of water for each ounce of acid.

The acid and water should be distributed in the different rooms in stoneware or china crocks, or wooden pails. The acid should be poured into the water, not the reverse, each crock to contain sufficient water and acid to

act upon three pounds of cyanide, the crocks having a capacity of two or three gallons each. The cyanide is tied up in three-pound paper packages, and one package suspended over each crock by a string from the ceiling into which a screw eye has been screwed. All the strings from the screw eyes are gathered to one point near the door where the operator is to make his quick exit.

Starting on the top floor the operator lowers the cyanide into the crocks containing the acid and water, closes the door and goes to the next floor below and repeats in each floor below to the basement. Do not attempt to escape by ascending a stair in the room after the cyanide has been dropped into the liquid because it is too hazardous. Doors should be barred to keep strangers out.

After 5 to 24 hours the door and windows should be opened for half an hour or longer to allow the gas to escape and in tight rooms and basement much longer, before entering. Entry should be postponed until after all the characteristic peach pit odor has disappeared.

If potassium cyanide is unobtainable sodium cyanide will answer. The strongest acid should be purchased, if of weaker strength more must be provided. The gas will kill all insects and vermin and all larvae.

## Elevator Twisted by Derailed Cars

The St. Anthony & Dakota elevator at Arthur, N. D., was badly damaged by a derailed switch of four cars about 10 o'clock a. m. Feb. 15. The local freight crew was pushing a string of cars over the siding that passes the elevator, when for some unknown reason the front trucks of the head car left the tracks, and the car catapulted into the corner of the elevator, overlapping it about four feet.

The 30,000 bu. elevator is of cribbed construction with a foundation of wood piers 3 ft. high on footing stones. Sufficient force was behind the impact to twist the entire elevator several feet, and carry a section of cribbing, the depth of the box car, an additional two or three feet out of line. This caused supporting foundation piers to topple, permitting the elevator to drop three or four feet with its load of 13,000 bus. of grain.

About 3,000 bus. of grain was spilled on the ground, most of which was salvaged. Cribbing and timbers supporting overhead bins were badly wrenched and twisted thru-out the structure and the leg so badly damaged as to necessitate rebuilding.

The St. Anthony & Dakota Elevator Co. immediately began arrangements for rebuilding the damaged side of the elevator, strengthening remaining timbers and resetting machinery that the plant might be put back in operation. The elevator is understood to stand on a site leased from the Great Northern railway, whose engine caused the damage.

The railroad company's lease of the building site no doubt makes the elevator owner liable for the damages resulting to its cars and relieves it of all responsibility for damage to the elevator. How unfair, how ridiculous.

## Would Have Farm Board Investigated

The Omaha Grain Exchange has called citizens to arms for an investigation of the Federal Farm Board. Its announcement follows:

At the present time there is some evidence of a return of confidence on the part of foreign wheat buyers, and sentiment would perhaps be more cheerful if it were not for the colossal amounts of wheat and cotton which the Farm Board holds and which it is liquidating very slowly. As long as these supplies remain in government control, hanging over the market, prospective buyers of farmers' produce will be overcautious and overhesitant. It will be next to impossible to get any substantial improvement in the ratio between farm products and manufactured goods. There is not likely to be any real recovery in grain prices until the Farm Board is eliminated and its stocks of wheat and cotton sold.

On Feb. 1, Senator Norris, of Nebraska, introduced a resolution in the Senate, providing for a joint congressional investigation of the Farm Board and the grain trade. Nothing has been heard of this resolution since it was introduced, and reports continue to come from Washington to the effect that:

They say, "There will be no investigation. The investigation has been killed. Sufficient facts were brought out in the hearing before the Senate committee on agriculture and forestry held Nov. 24-28, 1931, that no further investigation is necessary."

The investigation is necessary if the public is to be fully informed of the actual effect of Farm Board operations upon American agriculture, upon private business, and upon the taxpayers' pocketbooks. Yet there are no present indications that Congress will provide for this investigation. Every farmer and men in all lines of business are interested in knowing just what the Farm Board has done, what it has accomplished and what it expects to accomplish.

Every patriotic citizen should write his or her senator and congressman and ask them what has become of the Norris resolution, and what they are going to do about the investigation of the Farm Board.

If you don't attend to your own business—nobody else will! Write today.

**Urbana, Ill.**—A process for sweetening and preserving condensed milk with corn sugar is claimed to have been evolved by Dr. P. H. Tracy, associate chief in dairy manufactures at the University of Illinois, and R. J. Ramsey, his assistant. Their chemical discovery is said to open a potential outlet for 3,000,000 bus. of the nation's corn crop annually.

**Geo. S. Milnor**, manager of the Farmers National and pres. of the Grain Stabilization Corporation, has gone abroad for a vacation, he says. Sec'y Hyde of the Dept. of Agriculture, said Mar. 18 that an intensive effort would be made to sell wheat abroad. The market's response to these announcements was a drop from 64 $\frac{3}{4}$  to 59 $\frac{3}{4}$  from Mar. 14 to Mar. 18 for July wheat at Chicago. Refused more money by Congress the Farm Board must sell wheat and cotton somewhere to pay off the bankers.



The St. Anthony & Dakota Elevator at Arthur, N. D., wrecked by derailed train [See facing page.]



## Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. When you have anything to say of interest to members of the grain trade, send it to the Journals for publication.]

### Revival of the Dead Bean Pool

*Grain & Feed Journals:* The marketing promotions by the Illinois Agricultural Ass'n, the state branch of the American Farm Bureau Federation, having failed to bring about the prosperity promised by the agitators they are now looking for an alibi.

The I. A. A. recently voted to give the Soy Bean Marketing Ass'n financial assistance. The performance of this pool, that the I. A. A. was instrumental in organizing, is typical of all its marketing ventures.

At the time the pool was formed two of the most substantial firms in the country were guaranteeing the grower \$1.30 per bushel for soy beans, and the pool promoters promised more. What did the farmer get? The pool never paid more than a dollar. The pool hoarded the beans, borrowed from the Intermediate Credit Bank, and the falling market has left the pool with a burdensome corpse to bury.

The money obtained by the pool from the bank was used to make the initial payment of 20 cents to the grower members, and now it needs financial assistance from its parent, the I. A. A.

Far from having benefited the growers the pool has been a detriment, the industries buying beans dropping their price to that paid by the pool, which destroyed the \$1.30 market.

Instead of admitting the failure of the pool to create a better market the I. A. A. is throwing away the \$5 dues collected annually from members in a vain endeavor to keep the tottering enterprise on its feet.—W. C. Redfield.

### Government Hoarding Destructive to Export Trade

*Grain & Feed Journals:* Hoarding, according to those who are advising us to desist, is a great vice. Hoarding blocks the wheels of commerce and destroys opportunity and useful values. Hoarding is miserly and hoarding is associated with misers who are generally considered, the world over, as narrow minded individuals who are detrimental to society. Still, hoarding is the greatest vice of our national government today.

Hoarding of commodities is probably the greatest contributing cause to the perpetuation of the present depression. Hoarding of commodities probably inspired, to a large degree, hoarding of currency, or at least has forced this hoarding to some degree upon the individual who was affected by the hoarding indulged in by the national government under the guise of stabilization for cotton, grain and some other commodities quite numerous.

Hoarding of wheat and cotton has almost destroyed the export trade of the United States. Hoarding of grain and cotton which might have been marketed at materially higher prices has prevented the realization of many millions of dollars that would now be in circulation had not hoarding of grain and cotton been indulged in by the federal government through its agencies.

Hoarding of grain and cotton has deprived our railroads and steamships of valuable tonnage, it has deprived our exporters, our export brokers, our export bankers, our export

vessel agents, our export facilities of all kinds, of a tremendous amount of business. Had our commodities been marketed in the usual way, tariff barriers would not have been erected to destroy our commerce. Hoarding by the federal government under the guise of farm relief, but really for the purpose of perpetuating "white collar" farm agitators has led to the greatest depression ever witnessed.—James E. Bennett, Chicago, Ill.

### The 40,000,000-bu. Dump

*Grain & Feed Journals:* The humanitarian side of the question regarding the appropriation of 40 million bushels of wheat to be given to those in destitute circumstances has been emphasized so forcibly that little consideration has been given to other factors concerned.

From the standpoint of actual relief provided by this congressional measure and its economic consequences, however, we have a situation without precedent.

We have the Farm Board on the one hand, with its huge revolving fund of 500 million dollars virtually dissipated and protesting vigorously against Congress taking its wheat without reimbursement.

On the other side of the picture is seen the grain producer with millions of bushels of wheat remaining on farms unmarketed and the farmer in the most destitute circumstances in history.

It is recalled that American wheat producers in the last harvest implored the Farm Board and administration with hundreds of telegrams, letters, and delegations, to withhold government dumping of wheat and further depressing a market which was in the lowest depths in this generation. The Board defiantly refused as it was so eager to wash its hands of its great white elephant which was costing millions of dollars in retention. Finally the Board issued a statement after much political parley in which it was agreed that it would not dispose of more than 5,000,000 bus. of wheat monthly in domestic channels until July, 1932. Now, we have the spectacle of this Congress-Farm Board subterfuge whereby 40 million bushels of wheat is dumped in the farmers' face. It is provided that the 40 million bushels of wheat will be distributed by the Red Cross. Heretofore the Red Cross has been providing the wheat needs of the unemployed with money obtained from public subscription. It is safe to assume that in the distribution of this 40 million bushels of wheat no new demand will be opened because it is thought that no family that has been without funds to purchase food has been subsisting on air until Congress provided this wheat.

Congress, with its medicine chest of palliatives, has been handing out poison to sick patients and it seems that every time depressed agriculture shows the feeblest signs of improvement, another new adventure is delved into which makes convalescing business despondent.

The only relief that business and agriculture needs is to be left alone. Our farms have been the world's garden spots for centuries and never before have such disheartening conditions prevailed. It is up to every

farmer and the entire taxpaying public to end this destruction by demanding immediate action of congressmen to repeal the Farm Act with its many agencies. This can be brought about only through your action in sending a wire or letter to your representative in Congress voicing the true sentiment of "the folks at home." If we cannot get relief this way we will get it at the ballot box.—Wolcott & Lincoln, Kansas City, Mo.

### Competition with Rail Transportation

*Grain & Feed Journals:* We have been in favor of some system that would reduce the cost of transportation of the farmers' crops and cannot see that it will hurt the railroads to improve inland waterways. The railroads have been trying to pay a dividend on inflated stocks. If they did business like the balance of the business men, they could easily have made interest on their money all these years and paid dividends.

Of course we know that they have not done as they should and we also know that we cannot get along without railroads. They have always dictated to the patrons of the road and told us to pay their rates or get our transportation some other way. The farmers are doing this now, trucking their hogs to market, also trucking grain, and the merchants are having the goods brought to their stores with trucks and shipping out their butter and eggs by truck, rather than pay the rates charged by the railroads and also the trucking charge to and from the depot.—E. H. Moreland, Luverne, Minn., sec'y Tri-State Grain Dealers Ass'n.

Crop loans from the \$50,000,000 fund appropriated from the Reconstruction Finance Corp. bill to aid farmers who can not aid themselves, or secure aid from private sources will be distributed thru Farmers Seed Loan offices and help the incompetents to produce more grain and depress the price to all producers.

### Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other fellows from the field of daily strife and to be convinced that the much maligned horns are truly mythical. You can not afford to pass up these opportunities.

Mar. 28-30. Society of Grain Elevator Superintendents of North America at Sherman Hotel, Chicago, Ill.

Apr. 22-23. California Hay, Grain & Feed Dealers Ass'n at Los Angeles, Cal.

Apr. 27-28. Illinois Community Feed & Grinders Ass'n, Peoria, Ill.

May 10-11. Western Grain & Feed Dealer's Ass'n, Martin Hotel, Sioux City, Ia.

May 10-11. Illinois Grain Dealers Ass'n, Danville, Ill.

May 19-20. Kansas Grain Dealers Ass'n at Hotel Kansan, Topeka, Kan.

May 31-June 1. Pacific States Seedsmen's Ass'n, San Francisco, Cal.

June 16-18. Southern Seedsmen's Ass'n at Atlanta, Ga.

June 20. Farm & Grass Seed Group, A. S. T. A., Chicago, Ill.

June 21-23. American Seed Trade Ass'n, Sherman Hotel, Chicago, Ill.

June 28-29. Ohio Grain, Mill & Feed Dealers Ass'n, Argonne Hotel, Lima, O.

July 5-6. National Hay Ass'n, Ft. Wayne, Ind.

Sept. 19-21. Grain & Feed Dealers National Ass'n, West Baden Springs Hotel, West Baden, Ind.



## New Annex for Buffalo Elevator

A grain storage annex of 1,500,000 bus. capacity, a handsome office building and a fireproof garage were among the extensive additions during 1931 to the plant of the American Elevator & Warehouse Co., at Buffalo, N. Y.

The new elevator consists of 55 bins 20' in diameter and 125' high with 16 outside pocket and 15 interstice bins. The foundations of the elevator were carried to bed rock with 96 concrete caissons 5' in diameter. On top of these caissons was constructed a reinforced concrete under-story with 10' 6" clear head room. Three 42" belt conveyors 160' long above fill the bins; and four 36" conveyors 160' long in the lower story draw grain from the bins. The wider conveyor belts are pulled by 15-h.p. electric motors and the 36-in. by 10-h.p. motors, having herringbone gear speed reducers. Roller bearings are used on the conveyor rollers and convergers, and ball bearings on the head and tail shafts and trippers. Mixing chambers over out-bound belts and in bin story facilitate the blending of wheats.

The work house was raised one story to accommodate the new annex. The five elevator legs were extended to the top story and equipped with new 75-h.p. motors and rope drives. Two jack legs were installed, with 75-h.p. motors to re-elevate grain to the new storage annex. All grain from both the old and the new storage units is handled thru legs and scales in the head house. Two 1200-bu. type "S" Fairbanks Hopper Scales were installed.

Two Hess Steam Grain Driers each of 500 bus. per hour capacity, have been installed in the head house and provided with separate elevator legs, automatic scales and spouting for handling the grain to be dried. These driers are divided by a fire wall from the other part of the building, so that while

the driers are in the head house and very convenient for handling grain, they do not, in any way add to the risk of fire.

In addition to the driers there have been installed two wheat washers and one oat clipper. The elevator had already been equipped with complete grain cleaning machinery.

A new car shed and new receiving pits were built. With two tracks on each side of the elevator it is possible to receive on two tracks and ship on all four. Two car pullers are operated by 10-h.p. motors with herringbone gear reducers.

These new units, added to the existing plant, give the American Elevator & Warehouse Co. a 4,000,000-bu. grain elevator with two marine towers; boat loading equipment and complete facilities for cleaning, washing and drying various kinds of grain. The receiving capacity per hour is 50,000 bus. from boats and four cars by rail. Shipping is done at the rate of 24 cars and 50,000 bus. to boats, per hour.

The site on which the new elevator was built is 105' x 162' and at the time of the contract award was occupied by the office building and several garages. In order to utilize this site it was necessary first to construct a new office.

The office building is built of cream colored face brick to match the present mill building, and is 42' wide x 65' long and two stories in height. This building is fireproof thruout. The interior hallways and stairs are of marble and tile, the floors in the offices are of cork tile and all interior partitions are of steel. The building is completely equipped with the most modern plumbing and heating facilities and ample office space is provided to house the staff of both the Russell-Miller Milling Co. and the American Elevator & Warehouse Co.

The American Elevator & Warehouse Co. does a general merchandising business in all grains. Geo. Martin is manager, Ben B. Davis in charge of wheat, Dan Southwell of coarse grains, while Howard Gunnison is elevator superintendent.

All the work except the office building was designed by the Monarch Engineering Co., which had the general contract for the construction.

The plant is shown on outside front cover page.

### Grinding Government Wheat for the Red Cross

The Red Cross and the Millers National Federation have agreed upon the basis for grinding the 40,000,000 bus. of Farm Board wheat voted to charity by Congress.

All charges, that is transporting the wheat, grinding the wheat into flour, payment for bags for the flour and transportation charges on the flour from the mill to destination will be paid by the miller; the miller to be reimbursed in the by-products from the wheat and in wheat.

A standard conversion or grinding charge of 50c per barrel will be paid by the Red Cross and no more and no less will be paid. This is substantially below the average cost of the industry as determined at various times by the Federation, by the Tariff Commission and by the Federal Trade Commission.

Mr. Baxter and Mr. Sims, Red Cross officials in charge, state that insofar as it is reasonably possible to do so they will allocate the grinding in proportion to the volume of output by each mill during the past three years. They have opened offices in the Fisher Bldg., Chicago.

After the flour is milled and shipped the miller will bill the Red Cross for grinding, transportation and bags and deduct from this total the value of the millfeed obtained. When the invoice is approved for payment an amount of wheat, priced at the Grain Stabilization Corporation value on the day settlement is arranged, will be turned over to the mill in payment.

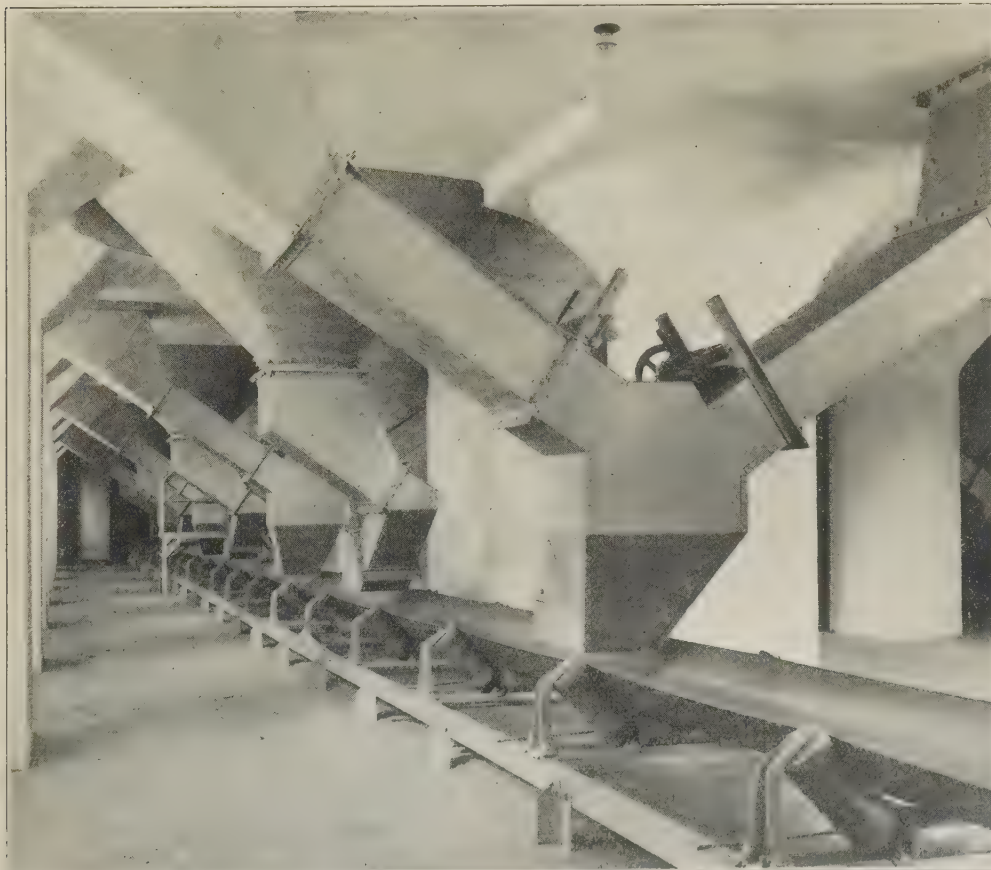
Burocratic growth at Washington is exemplified by the United States Department of Commerce, the ordinary expenditures of which rose from \$11,689,793 in 1917 and \$30,939,749 in 1927 to \$54,299,106 in 1930 and the amazing total of \$61,477,118 in 1931. This department now occupies a palatial building recently completed, covering three city squares. The country prospered amazingly for many years long before this army of tax eaters fastened its tentacles on the public treasury.

### Farmers Would End Stabilization Activities

Tom R. Cain, of Jacksonville, Ill., pres. of the National Farmers Grain Dealers Ass'n, objects to Farm Board subsidiaries taking over farmers' elevators. He says:

"These elevators have been our own property for years, and we have as much pride in them as in our schools, or as you have in your own community property. We don't want to sell out to a system over which we have little or no control, and which has not proved itself more economical than our present marketing system.

"We have more farmer members in our elevators than the entire membership of the American Farm Bureau Federation, yet its officers presume to speak for all agriculture. Reports from our membership indicate that seven out of every ten farmers are opposed to the Farm Board and would like to see its stabilizing activities ended."



A View of Outbound Belt in Well Lighted Basement of American Elevator at Buffalo, N. Y.  
[See outside front cover.]



## Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Decatur, Ill., Mar. 12.—The movement of farmers' and dealers' stocks of soy beans to market has been accelerated by the better prices made possible by the European demand which showed up. It is probable that the Japanese-Chinese war has interfered with the regular movement of the Manchurian beans to market.—H. I. Baldwin & Co.

New York, N. Y.—An export sale of 120,000 bus. of United States corn, the first in many months, was made Mar. 9. In recent years export trade in corn has been nominal, the domestic demand absorbing the supply; but this year the big surplus affords an opportunity for export. During the crop year of 1921-22 exports were 179,490,442 bus.

### Receipts and Shipments for February

**Houston, Tex.**—Shipments of grain by vessel during February were: Kafir 117,857 bus. and milo 34,285 bus.—Houston Merchants Exchange, L. P. Claussen, chief grain inspector.

**Galveston, Tex.**—Shipments of grain by vessel during February were: Wheat, 2,029,466 bus., barley 20,000, kafir 405,000, milo 435,000.—Galveston Cotton Exchange and Board of Trade, Geo. E. Edwardson, chief inspector.

**Montreal, Que.**—Receipts of grain during February were: Wheat 265,761 bus., corn 10,592, oats 83,383, barley 12,444, flaxseed 18,870, hay 12,328 bales, against wheat 605,485 bus., corn 18,250, oats 175,760, barley 31,140, flaxseed 40,860, hay 23,456 bales in February, 1931.—Montreal Board of Trade, J. Stanley Cook, sec'y.

**Portland, Ore.**—Receipts of grain during February were: Wheat 2,220,100 bus., corn 74,400, oats 43,700, barley 11,250, against wheat 1,969,100 bus., corn 67,200, oats 39,900, rye 2,900, barley 18,850, in February, 1931. Shipments during the same period were: Wheat 1,401,278 bus., oats 13,115, against wheat 398,484 bus., corn 90, oats 11,484, in February, 1931.—Portland Merchants Exchange, Ed Davis, sec'y.

**San Francisco, Cal.**—Receipts of grain during February were: Wheat 6,980 tons, barley 6,937, oats 934, corn 880, bran 138, beans 62,773 sacks, foreign beans 7,462 sacks, hay 946 tons, against wheat 2,796 tons, barley 31,278, oats 602, corn 1,026, bran 339, beans 24,715 sacks, foreign beans 54,351 sacks, hay 1,920 tons, in February, 1931.—San Francisco Chamber of Commerce, James J. Sullivan, chief inspector.

**Denver, Colo.**—Receipts of grain during February were: Wheat 260 cars, corn 583, oats 6, rye 1, barley 30, beans 4, grain sorghum 3, hay 29 cars, against wheat 122 cars, corn 661, oats 11, rye 1, barley 18, beans 167, hay 80 cars, in February, 1931. Shipments during the same period were: Wheat 86 cars, corn 188, oats 2, rye 2, barley 6, beans 72, against wheat 27 cars, corn 216, oats 2, barley 4, beans 145, in February, 1931.—Denver Grain Exchange, H. G. Mundhenk, sec'y.

**St. Joseph, Mo., Mar. 9.**—Increased industrial consumption of oats in the St. Joseph market during February resulted in oats receipts of 462 cars for that period, or a total of 924,000 bus. These arrivals compared to the previous best yearly total of 2,834,000 bus., set in 1931, or about 30% of the annual figure. A new daily oats arrival record of 78 cars was set on Feb. 23. Oats receipts for January of this year were 450,000 bus., making a total of 1,374,000 bus. for the two months, or nearly 50% of the previous annual total. Most of the receipts were red oats from Oklahoma and Texas territory.

**St. Louis, Mo.**—Receipts of grain during February were: Wheat 2,640,400 bus., corn 1,355,200, oats 532,400, rye 1,300, barley 76,800, kafir 44,400, hay 2,628 tons, against wheat 2,409,100 bus., corn 1,988,000, oats 1,986,600, rye 1,300, barley 228,600, kafir 62,300, hay 5,604 tons in February, 1931. Shipments during the same period were: Wheat 1,514,249 bus., corn 155,400, oats 381,000, barley 9,600, kafir 6,000, hay 972 tons, against wheat 1,281,000 bus., corn 1,258,600, oats 2,072,400, rye 10,400, barley 89,600, kafir 7,200, hay 3,552 tons in February, 1931.—C. B. Rader, sec'y Merchants Exchange.

**Cincinnati, O.**—Receipts of grain during February were: Wheat 500,800 bus., shelled corn 277,500, oats 178,000, rye 4,200, grain sorghams 1,400, ear corn 1,000, feed 120 tons, hay 1,452 tons, against wheat 195,200 bus., shelled corn 337,500, oats 230,000, rye 21,000, barley 11,200, grain sorghams 1,400, soy beans 9,800, feed 480 tons, hay 5,731 tons, in February, 1931. Shipments during the same period were: Wheat 336,000 bus., shelled corn 226,500 bus., oats 132,000, rye 2,800, barley 1,600, against wheat 195,200 bus., shelled corn 214,500, oats 294,000, rye 8,400, barley 1,600, in February, 1931.—Cincinnati Board of Trade, Inc., John O'Hara, in charge of weighing and inspection.

### Farm Reserves

Washington, D. C., Mar. 9.—The U. S. Dept. of Agriculture makes the following estimates:

Stocks on Farms March 1 (in thousand bushels)				
	5-yr. avr. 1925-1929	1930	1931	1932
Corn .....	1,051,029	958,111	703,529	1,103,691
Wheat .....	124,977	129,402	161,442	207,323
Oats .....	451,515	368,356	429,616	372,136
Barley .....	53,623	67,280	80,162	41,457
Rye .....	5,902	4,602	9,231	5,750
Stocks as Percentage of Previous Year's Crops				
Corn .....	38.7	37.8	34.1	43.2
Wheat .....	15.0	15.9	18.8	23.2
Oats .....	35.2	32.9	33.6	33.5
Barley .....	23.9	24.0	26.3	20.8
Rye .....	13.5	13.2	20.3	17.6

**Refusal of corn to pop**, according to Prof. J. C. Eldredge, of the Iowa State College, is due to insufficient moisture in the kernels, the popping process being caused by expansion of the moisture in the kernel into steam, which explodes it. Wetting the popcorn several times, until it has absorbed sufficient moisture will correct the condition, he says.

The past few years have not been the first in which the grain trade has been prosecuted for imagined ills by overzealous politicians looking for a scape-goat. In December of 1909, for example, Congressional attempts were made against future trading with a bill reading in part: "That it shall be unlawful to send or cause to be sent any message relating to a future contract of grain, cotton or other farm products, without intending that the grain, cotton or other farm products shall be actually delivered or received." Politicians have always tried to win the rural vote but often have done great harm to farmers.

### Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye and barley for July delivery at following markets for the past two weeks, have been as follows in cents per bushel:

	Wheat											
	Mar. 9	Mar. 10	Mar. 11	Mar. 12	Mar. 14	Mar. 15	Mar. 16	Mar. 17	Mar. 18	Mar. 19	Mar. 21	Mar. 22
Chicago .....	62½	62¼	62¾	62½	59½	59¾	59½	59½	57¾	56¾	57¼	55½
*Winnipeg .....	62½	62¼	61¾	61¾	59½	59½	59¾	59	57¼	55¾	57	54¾
*Liverpool .....	62¾	62¾	61¾	60¾	60¾	60¾	61¾	60¾	60¾	58	59	57½
Kansas City .....	54¼	54¼	53¾	54	51¼	51¼	51¾	51¾	49¾	47¾	48¾	47¾
Minneapolis .....	69¾	69	68¾	69	66¾	65¾	66¾	66	64	62¼	63	60¾
Duluth, durum .....	64¾	64¾	64¾	64¾	62	61¾	62¾	61¾	59¾	58¾	59¾	57¾
Omaha .....	52¾	52¾	52¾	52¾	49¾	49¾	50	49¾	47¾	46	...	...
St. Louis .....	60	60¾	59¾	60	57	56¾	57¾	57¾	55¼	53¾	54¾	...
Milwaukee .....	62¾	62¾	62¾	62¾	59¾	59¾	60	59¾	57¾	56¾	57¼	...
	Corn											
	Mar. 9	Mar. 10	Mar. 11	Mar. 12	Mar. 14	Mar. 15	Mar. 16	Mar. 17	Mar. 18	Mar. 19	Mar. 21	Mar. 22
Chicago .....	42¼	42¼	42¾	42¼	40¾	41¾	41¾	41	40¾	39¾	40¾	39¾
Kansas City .....	40¾	40¾	40	40	38¾	38¾	39¾	38¾	37¾	37	37¾	36¾
Omaha .....	39¾	39¾	38¾	38¾	37½	36¾	36¾	35¼	33¾	32¾	...	...
St. Louis .....	40¾	40¾	40¾	40¾	39¾	38¾	38¾	38¾	37¾	37¾	37¾	...
Milwaukee .....	42¾	42¾	42¾	42¾	41¾	41	41¾	41¾	40¾	39¾	40¾	...
	Oats											
	Mar. 9	Mar. 10	Mar. 11	Mar. 12	Mar. 14	Mar. 15	Mar. 16	Mar. 17	Mar. 18	Mar. 19	Mar. 21	Mar. 22
Chicago .....	25¼	25¾	25¾	...	24¾	24¾	24¾	24¾	24	23¾	24¾	23¾
Winnipeg .....	32¾	32¾	32¾	32¾	31¾	31¾	31¾	31¾	31	30¾	30¾	30¾
Minneapolis .....	...	...	...	...	...	...	...	...	...	...	...	24
Milwaukee .....	25¾	25¾	25¾	25¾	24¾	24¾	24¾	24¾	24¾	23¾	24¾	...
	Rye											
	Mar. 9	Mar. 10	Mar. 11	Mar. 12	Mar. 14	Mar. 15	Mar. 16	Mar. 17	Mar. 18	Mar. 19	Mar. 21	Mar. 22
Chicago .....	51¾	52¾	51¾	51¾	48¾	48¾	49¾	48¾	47	46¾	47¾	46
Minneapolis .....	48¾	48¾	47¾	47¾	45¾	45¾	45¾	45¾	44¾	43¾	44¾	43¾
Winnipeg .....	53¾	54¾	54¾	53¾	51¾	51¾	51¾	51¾	49¾	48¾	49¾	48¾
Duluth .....	49¾	49¾	49¾	49¾	46¾	47	47¾	47	45¾	44¾	45	44¾
	Barley											
	Mar. 9	Mar. 10	Mar. 11	Mar. 12	Mar. 14	Mar. 15	Mar. 16	Mar. 17	Mar. 18	Mar. 19	Mar. 21	Mar. 22
Minneapolis .....	42¾	43	42¾	42¾	42¾	41¾	41¾	41¾	41	40¾	41¾	40¾
Winnipeg .....	44	44¾	43¾	43¾	41¾	42	42¾	41¾	40¾	40	41	40¾

\*Deduction made on wheat only for depreciated currency.

## Crop Reports

Reports on the acreage, condition and yield of grain and field seeds, as well as on the movement to country markets, are always welcome.

El Reno, Okla., Feb. 27.—Oat seeding has been somewhat delayed on account of wet fields; but will continue vigorously. Wheat fields are perfect; no winter damage.—Farmers Mill & Grain Co., P. N. Kroeker, pres. and mgr.

Springfield, Ill., Mar. 16.—The ground is probably frozen deeper than previously this winter; 12 inches in the extreme north and 5 inches in the south-central. In some areas wheat had a light snow cover during a portion of the time. Some reporters say wheat is probably injured, others are uncertain, and still others report no damage.—Clarence J. Root, meteorologist, U. S. Dept. of Ag.

Jefferson City, Mo., Mar. 12.—In only a few localities is wheat reported in unfavorable condition. In eastern, middle and western counties wheat stand and color are reported excellent. Dry weather in the fall hurt a few fields in the west and southwest. Thruout northern, western and middle counties chinch bugs are reported quite plentiful. Hessian fly is scattered. Owing to heavy losses during 1930 and 1931 of red clover and timothy by drouth, farmers are generally seeding increased acreages for hay crops. Red clover acreage being seeded seems to be slightly less than last year and sweet clover shows a probable reduction around 15%. Korean clover has become quite popular, with the seeded acreage, expected at 225% of that grown in 1931. Nearly all sections are participating in the increase. Soy beans apparently will be around the same as last year, depending on weather conditions.—E. A. Logan, U. S. Bureau of Ag. Economics, and Jewell Mayes, Missouri State Board of Ag.

**Montreal, Que.**—The St. Lawrence River from Montreal to the sea was clear of ice the middle of March, the earliest in history, and ocean steamships are expected to arrive early in April.



## Legislation at Washington

The Senate Mar. 12 confirmed nomination to membership on the Farm Board of William F. Schilling of Minnesota, Sam H. Thompson of Illinois, and Frank Evans of Utah, after bitter attacks on the Board by Senators Norbeck, Schall and Trammell. The new members have unlimited experience in marketing gas, but no other commodity.

Senator Lewis Mar. 16 proposed consolidation of the Interior Department into the Department of Agriculture to save \$15,000,000 a year, abolition of the Interstate Commerce Commission to save \$50,000,000 a year, and consolidation of the Shipping Board into the Department of Commerce.

Senator Byrnes of South Carolina speaking in the com'te on agriculture Mar. 15 said he was in favor of eliminating stabilization operations that expense, waste and extravagance may be cut out of our governmental structure. "In my own state the pools handled only 32,000 bales of cotton last year, whereas ten years ago they were handling co-operatively 700,000 bales."

### Bills Introduced

**H. J. Res. 316** by Simmons would appropriate \$1,450,000 to the Sec'y of Agriculture for grasshopper control.

**H. R. 10241** by Steagall provides for a guaranty fund for depositors in national banks and for the creation of a bureau to be known as the Federal Bank Liquidating Board. Just another Board of tax eaters.

**S. 4034** by Sheppard, introduced Mar. 14, provides that transferrors for collection of negotiable instruments shall be preferred creditors of national banks in certain cases. Referred to the com'te on banking and currency.

**H. R. 9752** by Disney would place the Federal Farm Board under the Sec'y of Agriculture, and forbid any person from buying the crops at a price less than that decided by the Sec'y of Agriculture to be the cost of domestic production. No doubt the author of this bill has friends who will look out for him.

**S. 3697** by Gore would forbid the Farm Board or the Cotton Stabilization Corporation to sell any cotton, either in the spot market or in the futures market, prior to Jan. 1, 1933, for less than 12 cents a pound basis middling at New Orleans or other United States ports.

**H. J. Res. 324** by Howard provides that the Federal Farm Board is hereby directed not to sell, nor permit to be sold, in the domestic market at any time prior to Dec. 1, 1933, any of the wheat owned or controlled by the Wheat Stabilization Corporation for less than \$1.20 per bushel, basis Chicago. Why not burn both the wheat and the Board.

**H. R. 10242** by McClintic provides for the creation of a fund to protect depositors from loss by bank failures. Assessment of 1% on the capital stock of banks would be levied to create the guaranty fund, on new banks, and ½% on the average deposits of banks already organized.

**S. 3853** by Bingham would regulate interstate and foreign commerce in poisonous volatile substances intended for household consumption. Among the substances specified in this bill are: Aniline, benzol, carbon disulphide, cyanogen, ethylene oxide, formaldehyde, methanol, nicotine, nitrobenzol, sulphur dioxide, and certain halogen compounds of hydrocarbons.

## Wheat Pests and Their Influence on the Market

By R. O. CROMWELL, Statistician Lamson Bros. & Co.

Some authorities limit the name locust to migratory kinds and the name grasshopper to the non-migratory which is all right if everybody adopts it. Others limit locusts to certain scientific species and grasshoppers to certain different species. In the United States, until 1929, it had been more than half a century since any migratory species had done the slightest damage to crops. Non-migratory species, however, are always with us and must be fought by farmers in some region or another almost any year.

In the seventies, the nineties, and in 1930 the "Rocky Mountain grasshopper," as it sometimes has been called, migrated from its native habitat in Colorado, Wyoming, Idaho and Montana in which states, in rough arid sections, it is present to some extent every year. Some authorities believe that this insect is simply a long-winged phase of common varieties. We believe it correct to say that most authorities are of the opinion that migration is induced by successive years of extremely favorable conditions for reproduction; such conditions are unusual drouth and unfavorable weather for several important parasites. At the same time, the unusually dry weather brings a low food supply and forces migration in myriad numbers.

It is further believed that the migratory species may perpetuate itself for several years in a Subpermanent Region, which includes Manitoba, the Dakotas, and parts of Nebraska, Kansas, and Minnesota, but disappears from it in time.

There is recognized a third, a Temporary Region, which includes states bordering the Mississippi River; this region is only periodically visited and the species generally disappear within a year. The amount of dryness, and the vigor of parasite during the spring of 1932 will determine largely the probability of damage this year. It is too early as yet for accurate estimation.

Hessian fly, wire worms, cutworms, armyworms, wheat and joint-worm, straw-worm, saw-fly, stem-maggot, and the grain-louse are important species doing considerable damage some years, especially in restricted localities. All important diseases and pests are given popular treatment in government bulletins.

With wheat crops somewhere in the world always at some susceptible stage, damage from weather and pest is being found continually. An open market discounts good or bad conditions gradually from day to day as they become known. Were it not for the open market always available and seeking

news, the world might learn of a short supply and watch a radical, sudden rise to high price levels after the farmer had sold his crop; or observe a drop to low levels after it were too late to reduce his acreage. Without the open market, there would be an advantage to the individual, much greater than with it, to keep information secret as long as possible.

## Country Protests Against Farm Board and Burocracy

The fallacy of price control thru the Farm Board was apparent at first to the experienced grain merchants who denounced the Agricultural Marketing Act. Later the co-operative country elevators discovered that the Farm Board was destructive; and now the farmers and interior merchants are protesting because the Board has so depressed the market price of the farmers grain he has no buying power.

The Chamber of Commerce of Lincoln, Logan County, Ill., recently adopted resolutions that

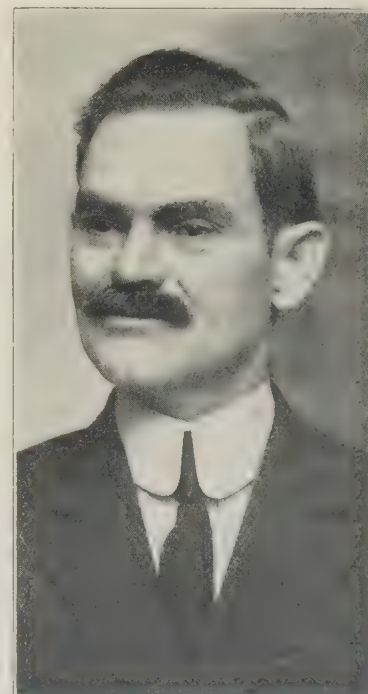
"We protest the placing of our great grain trade and its exchanges even remotely in the hands of the Department of Agriculture." It is further resolved that "it is our judgment that the Farm Board and its corporations have proved an Utopian experiment, costly not only to government but to the producers as well, resulting in depressed business in all lines."

## Chas. A. Ashpaugh Passes Away

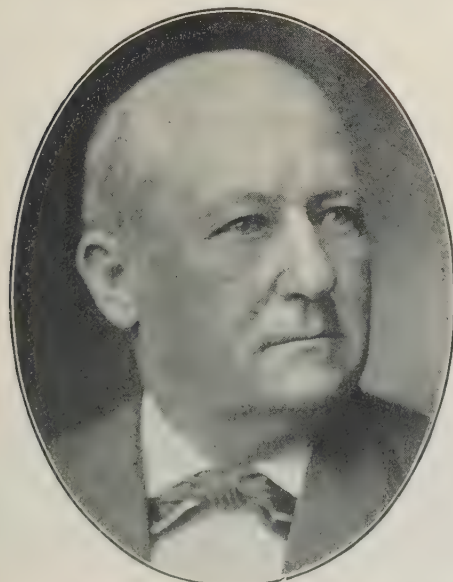
Chas. A. Ashpaugh, who at one time owned and operated several grain elevators in Indiana, died Feb. 17 at his home in Frankfort, aged 73 years. His health had been failing for several years, suffering from anemia.

He was born near Scircleville in Clinton County, and well known in the business circles of Frankfort, where he served as a member of the city council. He was president of the Indiana Grain Dealers Ass'n in 1911-12-13.

At the time of his death he was interested in the operation of the elevator at Flora, Ind., as one of the firm Ashpaugh & McCorkle. He is survived by his wife and two sisters. A daughter died in infancy.



Chas. A. Ashpaugh, Frankfort, Ind., Deceased.



E. C. Buchanan, Memphis, Tenn., Deceased.

## E. C. Buchanan Mourned

After the death of Edward Carlton Buchanan as reported in the Journal the directors of the Memphis Merchants Exchange on Mar. 11 adopted a memorial as an expression of the esteem in which they held this pioneer elevator operator. Mr. Buchanan was long a prominent and successful grain merchant in that market. He had served the Exchange in many different capacities including the presidency and was highly regarded by his fellow members and by the outside trade.



## Insuring Drafts against Bank Failures

By LYLE S. MCKOWN, *Minneapolis, Minn.*

During the nine year period 1921-1929 inclusive, bank failures, according to a report issued by the Federal Reserve Board, totaled 5,642. This amounted to an annual average number of 627. During the year 1930 failures totaled over 1,300, just double the previous nine year average.

A demand for protection arose. A market was finally found and a form of protection was devised by our agency, working in collaboration with the attorneys of several of the large grain and milling companies.

The form provides protection "against loss sustained by the insured through the failure of any bank or trust company (hereinafter called bank) in the continental United States of America or the Dominion of Canada, for a cause amounting to insolvency, to pay, or transmit for payment, to the insured the money such bank may collect, or participate in collecting, on any demand draft, sight draft, arrival draft, draft payable on a stipulated date after sight or arrival, trade acceptances and acceptance drafts (all such instruments being hereinafter referred to as drafts), which shall have been forwarded from any of the insured's offices . . ."

The limits of coverage vary slightly with the needs of the individual but generally are \$5,000 on any one draft and \$10,000 on any one bank.

The rate is 50c per one thousand dollars of total aggregate volume of drafts drawn, and volume is reported and premium paid therefor on a monthly basis. This is an extremely low rate in the face of the present serious condition in banking circles, as it amounts to only  $\frac{1}{20}$ th of 1%.

There is a minimum and deposit premium for the bond of \$100 payable in advance.

This protection immediately met with very widespread approval. Trade associations such as the Millers National Federation, Grain and Feed Dealers National Ass'n, and trade publications have recommended it highly.

Many grain and milling concerns of all sizes and from all parts of the country have availed themselves of this protection and have profited thereby. Losses during 1931 were extremely heavy as may well be evidenced by the fact that over 2,200 banks failed during that period—nearly four times the average number during 1921-1929 inclusive. Losses ran from \$15 to over \$2,000. While some concerns were fortunate in having no losses, nearly every assured reported at least one and some reported as many as 50.

It is absolutely impossible for anyone shipping to different points to select banks thru which his drafts will pass and thru which the proceeds will be returned with any assurance that those proceeds are not going to be caught in a failure. Bankers themselves will tell you that the condition of a bank may change almost over night due to a "run" or from some other cause. A bank in excellent condition today, may be forced to close its doors tomorrow. The number of failures last year proves this and so far this year the rate of failures has continued at nearly four times the normal rate.

As an emergency safeguard at least, if not as a permanent form of protection, the shippers draft bond has proven its value. It is not a so-called luxury form of insurance but under present conditions might well be classed as a vitally essential form for those whose business is conducted on a bill of lading draft basis.

Estimates indicate 300,000,000 acres suitable for cultivation in the Dominion of Canada. Only 57,000,000 acres were utilized for field crops in 1931.

## Speeding Up the Unloading Facilities of Terminal Elevators

More advancement has been made in recent years in speeding up the unloading facilities of terminal elevators than in any other department. For years the dirty, congested track shed with its noisy carpullers and power shovels and dust laden atmosphere was the slowest section of the plant and the most difficult to keep manned. Few workmen could stand the work for long. The receiving department was not only the slowest section of the elevator, but was the most difficult to keep in operation. For years the long used crowbar and axe retarded the starting of the flow of grain from box cars, in fact the grain door was the slow point of every elevator receiving bulk grain from cars. Today every up-to-date terminal and interior storehouse receiving bulk grain from cars is equipped with efficient mechanical facilities for expediting the removal of the grain door.

Rush movements, especially in the wheat producing regions of the southwest, have complicated the operation of even simple storage elevators. Combine harvesters with large trucks have dumped grain on the terminal markets as fast as the railroads could handle it. Grain has moved to central markets so fast that embargoes have been declared to prevent complete congestion.

To meet the demands of rush periods terminal elevators have built large storage annexes and initiated such important improvements as fast handling receiving legs wherein capacity has been stepped up thru increases in speed and special design of buckets; increases in size and number of openings from garner bins to scale hoppers; increases in the size of drain valves from scale hoppers; larger distributing spouts more flexibly arranged; wider conveyor belts, and improved signaling systems.

However, the handling ability of the elevator has no value unless it is matched by improved facilities for serving its increased capacity. To this end has come the enlargement of yard trackage for holding thousands of cars, of car dumping equipment that will empty as many as 11 cars an hour, of gasoline and diesel switching locomotives and carefully planned switching arrangements for quickly spotting cars on the car dumper so it may be operated to full capacity.

New terminal elevators have been built on large tracts of ground where ample room was provided for installing the maximum trackage required. A notable example is the Continental Elevator at Kansas City, Mo., which sets near the middle of an 84 acre plot, and has planned maximum storage capacity of 7,500,000 bus., though more can be added should need arise.

Every old elevator building a storage an-

nex has acquired adjacent lands for trackage, or filled such space as was available in hope of expediting the movement of loaded cars to the receiving pits and empties back to main line of the carrier serving it.

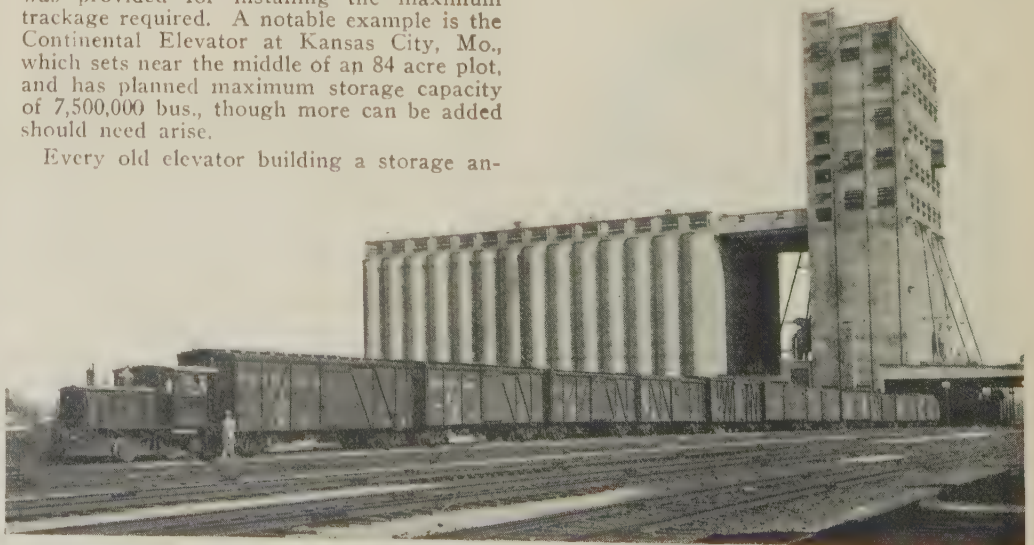
The improved car dumper has been one of the most welcome factors in speeding up the unloading of grain into the elevator. At some terminals with private switching facilities the dumper is unloading ten and eleven large cars per hour. Dumping the entire contents of a box car in less than six minutes as is now done, did not speed up the unloading until improved facilities for switching and spotting cars on the dumper were perfected. Ordinary car pullers could not keep the dumper busy.

At first terminal elevators with large trackage and rapid car dumping facilities hired small switch engines with full crews from the serving railroad to speed up dumping operations. This proved costly, and was soon abandoned in favor of light gasoline or diesel powered switching locomotives, such as were used in logging camps and by large factories with many switching requirements.

The internal combustion type of locomotive consuming distillate or gasoline for fuel and requiring one non-union man for operation and another one or two for coupling and uncoupling cars, quickly starting and stopping, soon won favorable consideration. Such switch engines incur no standby expense, for when the locomotive stops fuel consumption stops; nor do they incur costly boiler troubles from bad water conditions, which insures low maintenance cost.

Gasoline and distillate powered switching locomotives are available in sizes ranging from  $2\frac{1}{2}$  to 80 tons. Terminal elevators find 25 to 30 ton sizes readily adaptable to their needs, these engines demonstrating drawbar pulls sufficient to handle 15 to 30 loaded cars of grain at a time. Such engines were purchased from the Plymouth Locomotive Works by the Omaha elevator of the Cargill Grain Co.; the Continental Elevator at Kansas City; the St. Louis plant of the Farmers National Grain Corp.; the Cedar Rapids, Ia., and St. Joseph, Mo., plants of the Quaker Oats Co., and others.

This use of a private locomotive to serve the dumper brought one more problem in the chain of service, that of placing loaded cars, and switches in service tracks so that



Gasoline Locomotive Switching Cars at Continental Elevator, Kansas City, Mo.  
[See facing page.]



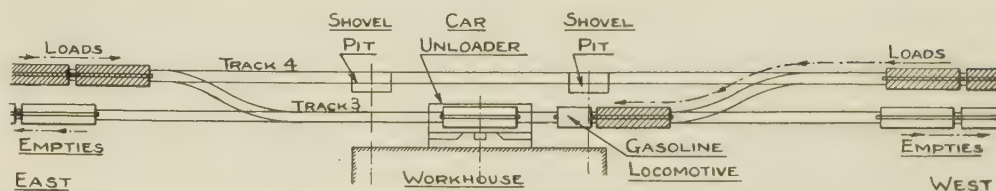
the locomotive could work with the least possible lost motion, quickly picking up loads and depositing empties. This proved a separate engineering problem for each elevator. Two prominent examples of the way it was worked out are the National Milling Co. elevator at Toledo, and the Continental Elevator at Kansas City.

At the National Milling Co. elevator two tracks run thru the track shed (see plan), but there is no tail track so that loads brought in on one track must be emptied and returned on the other track one at a time. This is necessitated by lack of space for a tail track thru water frontage.

The railroad's switching crew fills track A with loaded cars. The milling company's switching locomotive picks up a loaded car from track A, spots it on the improved car dumper, moves on back of the switch, reverses its movement and travels over the switch back thru the shed on track B. Reversing its movement again it crosses the second switch, picks up another load from track A, spots this on the dumper, simultaneously pushing the empty off the dumper. This empty is carried back with the locomotive on track B and left standing on this track in the track shed, while the locomotive continues its movement to pick up a third load, and spot it after the same plan. In this movement the empty left standing on track B is pushed down track B, which is reserved for empties. Endlessly passing around the circuit the switching locomotive soon has track A cleared of loaded cars and is ready for another switch. It completes the circuit in six minutes.

A tail track being available at the Continental Elevator, speeding up the switching was simplified. The Richardson Car Dumper on track 3 (see plan) may be served from either end. Track 4 is used for loaded cars; track 3 is used for empties. The locomotive pulls loaded car from the west end of track 4 over the switch to track 3, pushing an empty off the car dumper and spotting the loaded car on the dumper in a single movement. The empty is pushed back of the switch on track 3 by a flying switch, and the engine moves over the same switch to pick up a loaded car from the east end of track 4 adjacent. Then the movement is reversed. The locomotive shuttles back and forth over the dumper, picking up loads and depositing empties with minimum of lost motion. This consumes so little time that the car dumper may be worked to full capacity, yet leave the locomotive time enough to serve the two shovel pits on track 4 without interfering with dumper's operation.

These improvements demonstrate how the progressive grain elevator engineers have met the requirements of rush movements, not only with elevator handling speed, but with modern efficiency in getting grain to the elevator, quickly releasing railroad rolling stock for return to country points and preventing congestion of terminal yards and embargoes against receipts.



Track 4 is used for loaded cars; track 3 is used only for empties. The gasoline locomotive in the track shed of the Continental Elevator pulls loaded car from the west end of track 4 over switch to track 3, pushing an empty off car dumper and spotting a loaded car on dumper in a single movement. Empty is pushed back of switch on track 3 by a flying switch, and engine moves over the same switch to pick up a loaded car from the east end of track 4 adjacent. The operation is repeated in the opposite direction.

### Fumigation With Ethylene

By R. T. COTTON, Entomologist, U. S. D. A.

Ethylene oxide is a colorless and almost odorless liquid that leaves no appreciable odor on the treated grain, and does not injure the baking and milling qualities. It is  $1\frac{1}{2}$  times more powerful than carbon disulphide. It is not dangerous to human beings unless breathed in concentrated form for protracted periods.

It is inflammable in concentrations of  $3\frac{1}{2}$  lbs. per 1,000 cu. ft. of space, or over. Mixing it with carbon dioxide removed the fire hazard.

In experiments at Toledo, O., 10 lbs. of dry ice was mixed with 1 pound of ethylene oxide and 33 pounds used per 1,000 bus. of grain, with a little heavier dose at the bottom and top of the bin. The dry ice prevents the ethylene from evaporating while it is being applied to the grain.

The method of applying the mixture is as follows: The solid carbon dioxide which comes in 40 or 50 pound blocks is crushed with a sledge and then placed in pails in which a shovelful of elevator dust has been placed.

If 30 pounds of "dry ice" are placed in each pail, 3 pounds of ethylene oxide are added. The mixture is stirred up a little and is then ready to be taken to the bin floor. Each pail contains sufficient material to treat 1000 bushels. A small shovel with a long handle can then be used to trickle the mixture into the grain stream as it is run into the bin. If the operator knows how fast the grain is going into the bin he can so time his operations that each batch is evenly distributed throughout the grain.

A small shovelful of the mixture should be dropped into the bin immediately before the grain is started. It is also desirable to double the dosage for the first 500 bushels or until the hopper is well filled.

Successful fumigations have been made at grain temperatures as low as 44 degrees F. and as high as 88 degrees F.

The cost of the materials should not be more than about  $\frac{1}{2}$  cent per bushel.

The other fumigant mentioned as being promising is ethylene dichloride. This fumigant is similar in appearance and action to carbon disulphide tho not so powerful. It is a colorless liquid with an odor resembling

chloroform, that on exposure to air forms a vapor that is more than 3 times as heavy as air. This is slightly heavier than the vapor of carbon disulphide. It therefore has no difficulty in penetrating grain.

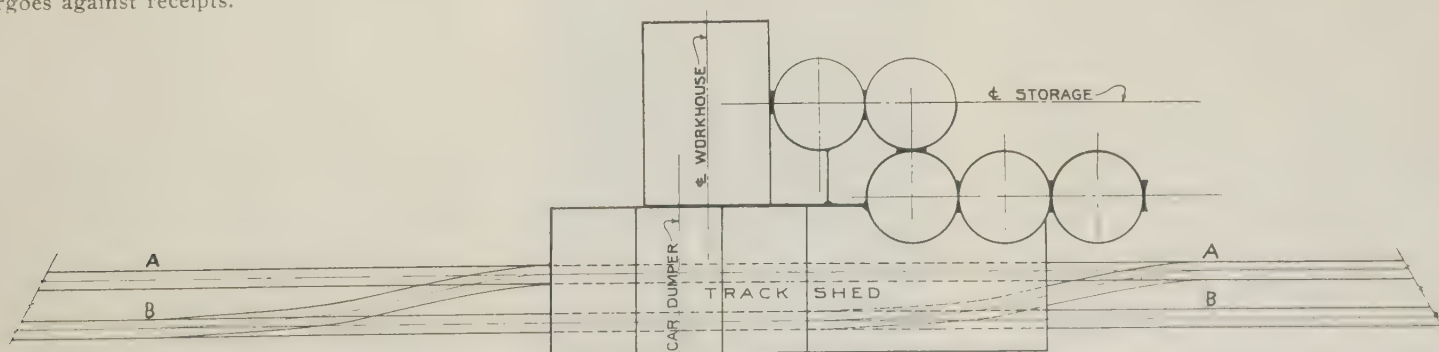
When mixed with carbon tetrachloride in the ratio of 3 parts by volume of ethylene dichloride to one part of carbon tetrachloride it forms a mixture that is non-inflammable and that is safe to handle. It is adapted for treating small quantities of grain in tight bins and box cars. It should be applied in the same manner as carbon disulphide, only to get comparable results about 5 times as much should be used. The mixture has a high boiling point, it does not evaporate readily at low temperatures, hence it should be used at temperatures of 75 degrees F. or above. It is cheap and can be purchased for about 10 cents per pound.

Wheat Germ is being made into a food product by the Consolidated Mills at Wichita, Kan., under the name of "Moar". The germ is pulverized, toasted, a little salt added and put up in 8-ounce cartons.

C. E. Huff, pres. of the Farmers National Grain Corporation, visited Washington recently in an attempt to get an appropriation of \$100,000,000 more for the Farm. Board, but received little encouragement from Congress or the administration. "Hello! Police!!"

Force of public opinion has evidently brought about the commendable action of public officials of Oregon, who have consolidated 16 offices, boards and commissions into the Department of Agriculture, abolishing many of them. The consolidation could well be emulated by many other states and the federal government as well, in the interests of economy and the relief of business from the meddling bureaucrats.

A wheat map of the Eastern and Western hemispheres stating for each country the 1931 production and the 10-year average has been published in novel form by the Rosenbaum Grain Corporation, Chicago, making obvious the reasons for the material decline in wheat prices and the inevitable failure of attempts to control the price of wheat by artificial and economically unsound methods. Copies will be mailed on request.



Plan for Expediting the Handling of Cars Thru Track Shed of National Milling Co., at Toledo, O.  
[See facing page.]



## Necessity of Grain Exchanges

By ARTHUR F. LINDLEY, Pres. Chicago Board of Trade Clearing House Ass'n

The natural need for effectively organized commodity markets may practically be said to have originated with the intensive railroad development, in the period 1850 to 1860. Prior to this development the agricultural areas were comparatively close to the centers of population and neighborhood consumption of crops was the large factor with such surplus as might exist being moved to other points of consumption by teaming or water routes.

The extensive building of railroads into the sparsely populated virgin lands of the central and near western states with a consequent increase of population, mostly agriculturists, resulted in the agricultural production in these areas being increased largely beyond domestic needs. This made necessary, for the economic marketing of surplus crops, some form of interior and tidewater marketing facilities of an organized character.

As early as 1836 there was established in St. Louis, Mo., The St. Louis Merchants Exchange, and in 1844 the Buffalo Corn Exchange was established at Buffalo, N. Y. The Board of Trade of Chicago was established in 1848 at Chicago, Ill. Following these, additional primary markets were established from 1856 to 1911 in Milwaukee, Wis., Peoria, Ill., Kansas City, Mo., Indianapolis, Ind., Minneapolis, Minn., Duluth, Minn., Omaha, Nebr., and Cincinnati, Ohio. Secondary markets were established from 1862 to 1867 in New York City, Baltimore, Md., Toledo, Ohio, Louisville, Ky., Philadelphia, Pa., and Boston, Mass.

Evolution has made futures transactions an incident in the marketing of actual commodities, in the form of hedging purchases and sales. This may be defined as, insurance of the price basis of purchases and sales of actual commodities.

To illustrate:—

A farmer at an interior point brings to his local elevator grain that he wishes to sell. It is obvious that if the local buyer had to assume the risk of price fluctuation from the time of his purchase to the time of his resale he would have to require a wide margin from the current market price; but through the functioning of the commodity markets he is constantly informed of the current markets and he is able to pay to the seller the current price less a moderate charge for his services and costs because he can sell for future delivery at the current price an amount equivalent to his purchase; and in event of a decline in price from the date of his purchase of the actual grain to the date of its resale he has the profit on his sale for future delivery, when repurchased, to offset the loss in value of his actual grain. If it appears to be more to his advantage he has the privilege of shipping the grain to the market in which his hedging sale was made and delivering it on his sale during the month for which he contracted to make delivery. The uses of the commodity markets for hedging purposes are many and varied.

Speculation may be said to be the balance between the immediate buyer and seller and an ultimate buyer or seller. To make this more clear let us suppose that a grain merchant having bought a parcel of grain wishes to make a sale of futures to hedge his purchase, and there is not at the same time in the market another merchant who, having sold a similar parcel of grain, wishes to make a purchase of futures to hedge his sale. In such a situation it is obvious that vexatious and costly delays would result had not the commodity exchanges developed a function to bridge the interval between hedging buyers and hedging sellers. Speculation is the function that bridges this gap but perhaps of greater importance is its bridging of the interval from the congestion of supplies at harvest time through the crop year period of their consumption. Were it possible to have harvested in each of the twelve calendar months exactly the amount of one month's consumption, speculation might cease to be an important factor in commodity marketing; but the harvesting and heavy marketing of wheat comes in the months of July, August and September, the harvesting and heavy marketing of corn in November, December and January and other crops in similar short periods. The resulting movement of actual grain to markets is therefore, at these periods, very largely in excess of immediate actual consumption and by taking the hedging sales of grain merchants against their daily purchases at these times the speculator permits the crops to move at levels of values that could not be obtained without his functioning. In periods of short supplies the speculator may evaluate his opinion of possible supplies and sell futures which are designated as short sales.

The purchaser of such sales may be merchandisers or processors who thereby hedge their sales of actual grain and their stabilizing influence is afforded by the speculator in times of small as well as large supplies.

## Government Loses Corn Borer Prosecution

The Co-operative Equity Elevator at Union Center, Ind., was charged by the government with having shipped two cars of shelled corn out of a quarantined area into an unrestricted area, from La Porte County to Chicago.

After the federal men had presented their evidence in court at La Porte the defense attorneys moved that a verdict be returned for defendant, and the court did so, to the chagrin of the U. S. Dept. of Agriculture officials, without hearing the defense evidence.

## Death of J. M. Haigler

The death of J. M. Haigler removes a picturesque character well known in Oklahoma, where his sobriquet was "The barefoot dealer of Carlton."

He bought leather belting for the elevator and shoes for the wife and children, but for eight or nine months of each year since 1876 he went barefoot. Besides the grain elevator that he operated since the Frisco was built he owned considerable land. He said he found much enjoyment in going barefoot. Going barefoot from necessity and not from choice may soon be the lot of wheat and cotton growers whose markets are being manipulated downward by \$50,000 and \$75,000 "experts."

Mr. Haigler died Mar. 20, aged 87 years.



J. M. Haigler, Carlton, Okla., Deceased.

## Advantages of Trading in Grain Futures

By HARVEY S. WILLIAMS, Chicago, Ill.

Farmers, especially small farmers, benefit more than any other class from the present system of futures trading, but unfortunately, many of them still do not take full advantage of the opportunity because of misinformation disseminated by certain self-appointed farm spokesmen.

These particular farmers do not realize that this big open market is theirs for the taking; that on any business day throughout the year, when the price looks attractive, the farmer can sell all or part of his crop thru a sale of futures on an exchange, and either cover the sale when the time comes to market his crop at his local elevator, or ship the grain in to fill his futures contract, choosing the more profitable course.

The odd lot, or one thousand bushel contract, makes this possible and practicable. It is a small farmer indeed who will not have eighty acres or more in one crop each year, and average yields of 15 bushels of wheat, 35 bushels of corn and 35 bushels of oats, small for Corn Belt states, would produce 1,200 bushels of wheat, 2,800 bushels of corn and 2,800 bushels of oats, which can be sold in the odd-lot futures market.

Hedging sales must be absorbed, which means that buyers must be found. Who are they, and where are they? During the period of heaviest country marketing, mills, elevator operators, and foreign consumers are securing more cash grain than they need; therefore they are not buying any futures. Obviously the buyers must be recruited from the ranks of the "People who will endeavor to forecast the future:" in brief,—speculators, who realize that twelve months consumption must be supplied from a two months harvest, and that, as this consumption proceeds, supplies will decrease and prices probably reflect these diminishing stocks. These individual speculators, en masse, constitute and supply the economic factor of speculation—"The self-adjustment of society to the probable," for the complete and proper functioning of which the present system of futures trading has become a necessity.

It is probably safe to assert that ninety per cent of the individuals who speculate in grain in the United States do so on the bull, or buying side of the market; and yet, every legislative attempt to restrict or prohibit future trading during the past forty years has been made in an effort to benefit agriculture through advancing prices. The logic certainly appears faulty, to say the least.

For the sake of argument let us assume that the Farm Board theory of co-operative marketing is absolutely correct and that such co-operation to the extent of one hundred per cent would represent absolute perfection. If this Farm Board principle is correct, then in all justice, it must be equally applicable to buyers as well as sellers. Again assuming the impossible, let us picture a single buyer representing all consuming interests, foreign and domestic, in conference with the single sales representative of the producers. Their views being of necessity completely divergent, a deadlock results and the boys back on the old homestead are beginning to demand cash for their crops to buy tires and gasoline. At this stage a third figure enters the picture and offers the farmer seller a price substantially above that bid by the consumer buyer. When he has recovered from his delighted surprise the seller asks the name of the newcomer. Apologetically, he admits that his name is "SPECULATION," whereupon the producer salesman flies into a violent rage, declares "SPECULATION" to be the cause of all of his woes, demands his immediate annihilation, and proceeds to sell his grain at the price offered by the remaining buyer who has no competition.

Possibly a fanciful conception, but I believe it represents the real situation.

Suppression of quotations on corn as requested by the Argentine ministry of agriculture is declared by Julio C. Urien, government investigator, to have the opposite effect to that intended, and he recommends that quotations for futures on the Buenos Aires and Rosario exchanges should not be discouraged. Sr. Urien, however, falls into the error of recommending that the volume of futures operations by each firm should be limited. If a market is to reflect conditions it must be open and unrestricted.



# Grain and Feed Trade News

Reports of new firms, changes, deaths and failures; new elevators, feed mills, improvements, fires, casualties and accidents are solicited.

## ARKANSAS

Green Forest, Ark.—Ramsey Enix recently purchased the P. D. Eaton mill and feed business at this point.

Pine Bluff, Ark.—M. W. Shelton, who some time ago resigned as vice-pres. of the Whyte Feed Mills, has been elected a vice-pres. and director of the Riley Feed Mfg. Co., of this city, and assumed his new duties on Mar. 7. H. A. McMillan, manager of the Riley Co., is quoted as saying that his company's plans for the immediate expansion of its several lines have made it necessary to enlarge the organization. Mr. Shelton is well known among feed buyers thruout the territory served by Pine Bluff Mills. He came to this city in 1922 from Nashville, Tenn., where he had been engaged in the feed business.

## CALIFORNIA

Gerber, Cal.—Machinery was being conditioned early in March and the California Alfalfa Milling Co. was getting ready to resume operations within the coming five or six week on the new crop of alfalfa.

Stockton, Cal.—The warehouse on West Weber Ave., valued at \$150,000, owned by the Sperry Flour Co. until taken over by Capt. Benjamin Walters several years ago, has returned to the ownership of the Sperry Co. after Capt. Walters canceled a contract to purchase the property. The warehouse will continue to be used by the Schuler-O'Connell Grain Co., which has renewed with the Sperry Co. the lease it had with Walters.

Marysville, Cal.—A meeting of grain warehouse men was held in this city in February, at which the whole Sacramento Valley warehouse group was represented; Phil O'Connell, pres. of the California Hay, Grain & Feed Dealers Ass'n, was present. Topics discussed were storage conditions and costs, and plans were considered for co-ordinating the efforts of the warehouse interests, the grain trade and the State Dept. of Agriculture in combating the grain weevil evil and its attendant losses. D. D. Mackie, in charge of the Division of Entomology and Pest Control, is reported to have delayed action by his department until all factors of the grain and warehouse industry can be called together to map out a practical plan for action, which should be done before another crop is harvested.

## CANADA

Toronto, Ont.—The Canada Malting Co., Ltd., will add to its Toronto plant a 434,000-bu. storage annex and a marine tower. Plans for some have been prepared by the John S. Metcalf Co.

Medicine Hat, Alta.—The Gleichen Flour Mill Co. is now occupying its new building, which consists of two stories and a cupola on a full concrete basement, with an office building and a heating plant about 35 feet distant.

Vancouver, B. C.—H. Murray Cameron, a well known grain broker, is reported as having gone into partnership with Sidney Metcalfe, mentioned in the Jan. 27 Journals as having opened a grain brokerage business here. Offices of the new firm are in the Marine Bldg.

Port Colborne, Ont.—Richard Robinson, an employe of the Government grain elevator here, was found dead, on Mar. 3, at the bottom of a bin in which he was working. He apparently had fallen from the top of the structure, 90 feet above the spot where his body was found.

Prince Rupert, B. C.—William McIvor, superintendent of the Alberta Wheat Pool Elvtr. at Prince Rupert, formerly well known elevator man at the head of the lakes, died at this city Mar. 2, from heart trouble, from which he had suffered for some time. He was about 45 years of age. Coming to this country from Scotland in 1914, he went to Fort William, Ont., shortly afterward joining the staff of the Government elevator at Port Arthur. He was with the Government house for 12 years, finally being promoted to assistant foreman. In 1926 he became foreman of the Alberta Pool Elvtr. at Prince Rupert, and after a year was promoted to superintendent. His widow survives him.

## COLORADO

Padroni, Colo.—The \$8,000 loss sustained by the W. C. Harris Grain Co. in the burning of its elevator Sunday evening, Feb. 28, shortly after 9 o'clock, was practically covered by insurance; 3,000 bus. of corn stored in the elevator was a total loss. Fire started from an undetermined source in the cupola of the elevator. The Harris Co. expects to start construction of a new elevator to replace the burned one at an early date.

## ILLINOIS

Fountain Green, Ill.—A feed mill has been established here by Al Simmons and Mac Hobart.

Mendon, Ill.—Owned and operated by A. M. Parrack & Son, a new feed mill has been opened at this point.

Worden, Ill.—The Worden Farmers Co-op. Elvtr. Co. has changed its name to the Worden Co-op. Elvtr. Co.

Taylorville, Ill.—The Taylorville Farmers Grain Co. has installed new equipment at its elevator for the making of mixed feeds of all kinds.

Mount Morris, Ill.—L. H. Blair, manager of the Mount Morris Elvtr. Co.'s elevator, who has been seriously ill at his home here, shows some improvement.

Kankakee, Ill.—Rollins Grain & Lbr. Co., incorporated; capital stock, \$10,000; incorporators: E. E. Rollins, Fred Clark and H. H. Birr; general grain and lumber business.

Jacksonville, Ill.—Harold Mason, manager of the elevator of C. R. Lewis & Co. at Bardolph, Ill., for the past year and a half, has been transferred to the Lewis elevator at this point.

Symerton, Ill.—Symerton Grain & Lbr. Co., incorporated; capital stock, \$20,000; incorporators: R. A. and Mrs. R. A. Baskerville, John H. and Mrs. John H. Jones; to deal in all farm products.

Wenona, Ill.—Grain dealers of the Streator-Wenona territory will meet at the Stanton Hotel, this city, on Mar. 24, at 7 p. m. After the dinner is disposed of, Sec'y Culbertson, of the Illinois Grain Dealers Ass'n, will discuss some interesting matters with those present.

Bardolph, Ill.—G. A. Rosson, of Mount Sterling, has been appointed manager of C. R. Lewis & Co.'s elevator, succeeding Harold Mason, who has been transferred to the firm's elevator at Jacksonville.

Claytonville, Ill.—The new Farmers Grain Co.'s elevator that replaces the one burned last October has been completed. The capacity is 16,000 bus., it is operated by electricity and has the latest equipment for handling grain.

Fitchmoor (r. f. d. No. 5, Mendota), Ill.—Fitchmoor Grain Co., incorporated; capital stock, \$5,000; incorporators: William Burkart, Sr., Herman J. and Albert Lamps, T. J. Murphy and C. L. Flaherty; general grain and lumber business.

Manhattan, Ill.—The safe in the Manhattan Grain Co.'s office was broken into, early in the morning of Mar. 3, and papers of every description were scattered over the floor. Nothing was taken, as far as was known. Money is never kept in the safe.

Rochester, Ill.—The elevator office reported in the Journals last number as having burned in a disastrous fire that consumed nearly half the village, was that of the Charles W. Frame Grain Co., who bot the Twist Bros. Elvtr. some time ago.

Sullivan, Ill.—The West End Elvtr., Burney McDavid manager, announced on Mar. 4 that it was again open for business, and that it would be conducted as heretofore, doing a general grain business. A feed grinding mill is operated also, and coal is carried.

Chatsworth, Ill.—The regular meeting of the grain trade of the Chatsworth territory was held in this city, at the Chatsworth Hotel, Mar. 22, at 6:30 p. m., at which hour dinner was served. Matters of interest and moment to grain dealers were discussed.

Yates City, Ill.—The R. M. Holt Feed Mill opened again Feb. 22, after being closed for over a week on account of the death of the former owner, R. M. Holt. The business is now under the management of Charles Watson, brother of Mrs. Holt, who has been in charge during the months of Mr. Holt's illness.

Blue Mound, Ill.—Ezra Crow, who had been engaged in the grain business here for 51 years, operating as the Blue Mound Grain Co., and was also a director of the Blue Mound State Bank, died Mar. 7 at St. Johns Hospital, Springfield. He and his wife had recently celebrated their 58th wedding anniversary. Besides his widow, he is survived by three sons and three married daughters.

Assumption, Ill.—The newly organized Farmers Elvtr. Co. has purchased the L. F. Webb Grain Co.'s elevator for \$7,500. The Webb Grain Co. was organized last September, William Owens being associated with Mr. Webb in the company. The elevator is up-to-date and well equipped. C. Conner and Samuel Cushing have been employed as managers. The officers of the Farmers Co. are: Pres., C. C. Corzine; sec'y, C. Conner; treas., A. L. Michaels.

Taylorville, Ill.—The Barnstable-Wareschaper feed and supply interests have been re-organized into three separate firms: Barnstable Bros. Feed & Supply Co., Inc., Taylorville, holds property of former company at Taylorville; Barnstable-Schaper Feed & Supply Co., Inc., Nokomis, holds property of former company at Nokomis and Pana, and Barnstable-Ware Feed & Supply Co., Inc., Hillsboro, holds property of former company at Hillsboro, Litchfield and Butler. The incorporation of each of these companies was reported in the last number of the Journals under the three cities of Taylorville, Nokomis and Hillsboro.

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Beardstown, Ill.—Our 250,000-bu. elevator [construction of which was started last fall, as reported in the Oct. 14 Journals] is still being built. It will be completed in about 30 days [from Mar. 15]. We did not do anything during the winter months on account of the weather hazard. After this is completed, our total elevator capacity will be about 900,000 bus.—Schultz, Baujan & Co., by E. E. Schultz.

Ottawa, Ill.—The dispute among the officers and directors of the Wallace Grain & Supply Co. over the selection of a manager was finally decided in favor of Henry Bonges, who has been manager of the company for 21 years. B. J. McGrath, who has been assistant manager for 13 years, sought to succeed Bonges. The board vacated the position of assistant manager. McGrath was elected a director.

Vandalia, Ill.—The Elam Co. has completed the installation of a new corn cracking unit in its plant. The company intends to enter the carload business in the southern and eastern states, making a specialty of screen cracked corn and whole sacked grains. The plant is now equipped to make its own scratch feeds, egg and starting mash and dairy feeds. The installation of the new unit gives employment to three more men.

Champaign, Ill.—The College of Agriculture of the University of Illinois, has just issued a bulletin on "How to Stop Weevil Damage in Stored Grain" which is being given wide circulation by county agents and other so-called farm advisers thruout the state. It recommends the use of bisulphid of carbon, which has resulted in so many explosions and destructive fires that all fire insurance companies now have a clause in their policies voiding policy in case bisulphid of carbon is used. Owners of stored grain should be warned against the explosive character of bisulphid.

Lewistown, Ill.—Clover seed was stolen from the Holmes Elvtr. during the night of Feb. 24, and a few days later three men, Eugene Rigley and Wooddey Powless, both of Bushnell, and Frank Bradley, of near Avon, were arrested for this theft, and it is believed that a number of other thefts of clover seed from elevators in Fulton County will be cleared up by this arrest. Officers are said to have recovered a part of the seed stolen from the Holmes Elvtr., in Bushnell, and another part was found at the Bradley home. Rigley was arraigned in court on a burglary charge and his alleged companions were held for receiving stolen property.

#### CHICAGO NOTES

Frank E. Alstrin has withdrawn as a general partner of the firm of Stein, Alstrin & Co. He will remain with the firm as manager of the grain department.

Henry Crawford, who was engaged in the grain business in Chicago for more than 40 years, died at his home in this city on Mar. 16, after an illness of five days, at the age of 62 years. His widow, three sons and two daughters survive him.

Herman Steen, sec'y of the Millers National Federation, with offices in this city, went to Davenport, Ia., to attend the funeral of his father, Frederick D. Steen, which was held on Mar. 12. Mr. Steen was a leader in community and civic affairs in Iowa.

Electrification of the Keystone Elvtr., owned and operated by the Edward R. Bacon Grain Co., has been completed by the John S. Metcalf Co. The work consisted of replacing the steam plant with 17 Westinghouse Motors direct connected thru silent chain, installation of a switch board and accessories, fire pump and manlift. Showers, toilets and lockers were installed in the old engine room.

Members of the Chicago Board of Trade by a vote of 593 to 34 restored the grades of No. 1 and No. 2 yellow hard winter wheat to valid tender on future contracts. Under the provisions of the amendment trading in both old and new July and September wheat contracts began on the exchange Mar. 12.

The band of the Board of Trade Post No. 304, American Legion, has been newly organized, under the leadership of Armin F. Hand. At its first public appearance, in Grant Park, on Mar. 20, it attracted a large crowd. Mr. Hand expects the band will have 100 members by Memorial Day.

Recent new members of the Board of Trade are: John W. Hanes, Thomas A. Richardson, Gustave S. Geiger, Charles A. Schreiner, Jr., Harry M. Mulberry, Fred D. Sadler, Harry G. Mills, Edward E. Schultz, of Schultz, Baujan & Co., Beardstown, Ill., Roy S. Stein, Samuel A. Whitehead. Memberships transferred: Edwin S. Waterbury, Harry Barbee, Estate of John Schultz, Estate of Harold G. Stein, Louis W. Zimmerman, Dean Dillman, Estate of Frederick R. Burrows, David D. Weiss, Frank H. Day. Change in registration of members: William R. Bawlf, Winnipeg, Man., registered for own account (was registered as pres. N. Bawlf Grain Co., Winnipeg); Sim Fernandes, registered for Fernandes & Co., Springfield, Ill. (was registered for Fernandes Grain Co., Not Inc., Springfield).

#### INDIANA

Knightstown, Ind.—James A. Hanna sustained slight damage to his electrical equipment recently.

Cross Plains, Ind.—Mrs. Mary Kamman purchased the Cross Plains mill property recently at commissioner's sale, and expects to operate it.

Stroh, Ind.—The grain elevator owned by the Perkins brothers and operated as the Stroh Grain Co. was broken into early in the morning of Mar. 1, but nothing was stolen.

Hope, Ind.—Stafford Grain Co. is adding to its feed equipment a hammer mill as well as a complete feed control for the same. The improvement is being installed by L. J. McMillin.

Bourbon, Ind.—H. B. Frye, of Argos, has bot the elevator building here and plans to overhaul it at once and start operation. Bourbon has been without an elevator for several years.

Indianapolis, Ind.—The Acme-Evans Co., whose "Acme Elvtr.," as it was known locally, burned last December, as reported in the Dec. 23 Journals, plans to rebuild the house and install machinery and equipment.

Inwood, Ind.—The Inwood Elvtr. Co., Inc., incorporated; capital stock, 100 shares at \$100 each; incorporators: Hannah K. Moses and Roland Apfelbaum; to carry on a grain business. The company operates an elevator at Inwood; headquarters are at Fort Wayne.

West Dana (Dana p. o.), Ind.—The Raven Elvtr. Co. has purchased the West Dana elevator from Bert Mishler and opened it for business. The Raven Co.'s three elevators, at Raven (Scotland p. o.), Ill.; Scotland, Ill., and West Dana (Dana p. o.), Ind., now operate under the same management, with headquarters at Scotland, M. A. Bonwell being manager.

Swayzee, Ind.—The safe of the Swayzee Grain Co. was blown open by burglars, Mar. 3, who were frightened away by the approach of the company's manager, Walter Lavengood, who lives but a short distance from the elevator and heard the explosive charge. The thieves had escaped by the time he arrived, but had failed to get the money in the safe.

Jasper, Ind.—Conrad Eckert, 89 years old, pioneer flour and feed man of Jasper and Civil War veteran, died at his home Mar. 16, after a short illness. In 1900 he organized the Victoria Milling Co. here in partnership with Gerhard Welp and Leonard Stemple. He also was engaged in the milling and feed business at Valley Park, Mo., for a number of years. He is survived by the widow and six children.—W. B. C.

Waynetown, Ind.—Waynetown Grain Co. has added to its already very complete plant a McMillin Electrical Truck Dump.

#### IOWA

Fort Dodge, Ia.—The Farmers Elvtr. Co. has installed a new feed mixer.

Mason City, Ia.—The Cerro Gordo Farmers Co. will manufacture some new mixed feeds.

Duncombe, Ia.—The electrical equipment of the Webster City Elvtr. Co. was slightly damaged recently.

Pomeroy, Ia.—O. C. Wickey, manager of the Pomeroy Co-op. Grain Co., was nominated for councilman at a recent caucus.—A. G. T.

Marshalltown, Ia.—Ajay Feed Mfg. Co., incorporated; capital stock, \$10,000; incorporators: Daniel Holveck, James Curry, A. J. Jansen.

Council Bluffs, Ia.—The new superintendent of the Rock Island Elvtr., operated by the Trans-Mississippi Grain Co., is M. Waddington.

Lawler, Ia.—Leo Reihle has succeeded Henry Denner at the Farmers Elvtr. Co.'s elevator, the latter having leased a farm near here.

Grundy Center, Ia.—Lee Shultz, employed at the Farmers Elvtr. Co.'s elevator, was married on Mar. 2 to Miss Elsie Boldt, of Gladbrook.

Oakwood (Marble Rock p. o.), Ia.—Julius F. Huxsol, manager of the Oakwood Elvtr., has retired from the management and C. O. Melcher has been appointed to succeed him temporarily.

Cedar Falls, Ia.—George B. Miller, who some time ago bot the assets of the Brown-Fallgatter Co., Inc., from the receiver, is operating under the name of the Miller Products Co. and is manufacturing feed, flour and cereals.

Whittemore, Ia.—O. J. Kaschmitter was nominated for mayor and D. W. Ault as councilman. Both are local grain men, the former operating under his own name, and the latter being manager of the Farmers Elvtr. Co.'s elevator.—A. T.

Knoxville, Ia.—The Hawkeye Mill was entered by robbers Monday night, Mar. 13, who took nearly \$300 in cash and checks. The combination of the safe was successfully worked and the cash drawer chiseled out.—Art Torkelson, with Lamson Bros. & Co.

Blencoe, Ia.—Charles Barnes has awarded the contract for building a 20,000-bu. elevator to the Williams Const. Co. Mr. Barnes, who was manager of the Farmers Co-op. Elvtr. Co.'s elevator at this point for 13 years, recently engaged in business for himself, as reported in the last number of the Journals.

Eagle Grove, Ia.—Alonzo Fisher, for 24 years manager of the Farmers Elvtr. Co.'s elevator at this point, is reported to have confessed that he was an embezzler, and to have been sent to the Fort Madison penitentiary for five years. His shortages, which covered a period of several years, were due to his betting on horse races.

Mount Union, Ia.—The elevator at this point that burned at midnight, Feb. 26, as reported in the last number of the Journals, was known as the north elevator of the Farmers Elvtr. Co. and was one of two owned by that company here, and was not being used for grain at this time. A small structure beside the elevator, used to house a feed grinding mill, burned also.

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## KANSAS

Grant, Kan.—Fire of unknown origin destroyed the elevator of N. Peter Peterson on Mar. 3.

Wilmore, Kan.—John White has resigned as manager of the Wilmore Co-op. Elevtr. Co.'s elevator.

Haddam, Kan.—Ted Beeman has purchased the elevator here formerly owned and operated by V. O. Ward.

Topeka, Kan.—The Inter-Ocean Mills Co.'s plant, that has been closed for several months, expects to open in July.

Randolph, Kan.—The Randolph Farmers Union Co-op. Ass'n sustained damage to its electrical equipment this winter.

Hays, Kan.—A new steam heating system has been installed by the Hays City Flour Mills, whose plant includes an elevator.

Topeka, Kan.—The 35th annual meeting of the Kansas Grain Dealers Ass'n will be held in this city, May 19 and 20, at the Hotel Kansan.

Garden City, Kan.—The Co-op. Equity Exchange is reported to be contemplating the installation of a flour mill in connection with its elevator business.

Ellsworth, Kan.—The local plant of the Salina Grain & Milling Co. has been improved by the installation of a motor on the main drive and also a new heating plant.

Wichita, Kan.—Miss Betsy Christina Ogren is a new arrival in the home of Mr. and Mrs. C. C. Ogren, having arrived Feb. 19. Her father is head of the Ogren Grain Co.

Bellefont, Kan.—On Mar. 1 the plant of the Offerle Co-op. Grain & Supply Co. was damaged by fire caused by friction of lineshaft on metal housing over lineshaft.

Dellvale, Kan.—Charles Murray, of Colby, Kan., obtained control of Fred Mosher's elevator here last December. I have had charge of the house since that time.—C. K. Murray.

Bern, Kan.—Frank Murray, of Rossville, has succeeded Hollis DaMetz as manager of the Derby Grain Co.'s elevator. Mr. DaMetz, who has been manager for the past two years, will give his attention to his restaurant business.

Sublette, Kan.—Fred Simmons, for the past two years manager of the Richardson Elevtr. at Copeland, has bot the interest of F. E. Murphy in the Sublette Grain Co. and will take charge as manager. Claud M. Cave retains the controlling interest.

Hutchinson, Kan.—After having turned down the proposal to make Hutchinson a contract grain market, members of the Board of Trade voted on the question a second time and approved amendments to exchange rules to permit trading in grain futures.

Leoti, Kan.—The plant of the Leoti Mill & Elevtr. Co., owned for the past year by the Rickel Grain Co., of Salina, Kan., has passed into the hands of the Kansas Wheat Pool. A. E. McClimans will manager the plant. The old mill and elevator company will be dissolved.

Potwin, Kan.—The office of the Laird Elevtr. Co. was entered by thieves, during the night of Feb. 28, who carted off the small safe which was found about a mile from town, cracked open, and about \$20 in cash taken from it. The elevator office was entered thru a window.

Lyons, Kan.—One group of creditors of the Central Kansas Milling Co. has asked for the removal of F. E. Long, pres. of the company, as receiver, in the friendly proceeding to protect the assets of the company, as reported in the last number of the Journals. At the April term of court the matter will be argued, as another group dissents.

Dodge City, Kan.—America will never get out of this mudhole, if we have to depend on jokesmith, wise-cracker, or the promoter of class hatred and breeder of international misunderstanding. The farmers, the workmen, the preachers, the teachers, the small business-men, these are the ones on whom the burden must fall for a little clear thinking. If the politicians won't perform, kick them out.—C. C. Isely.

Oakley, Kan.—The Prather Milling Co. writes as follows regarding the mill recently re-opened for business, as reported in the Feb. 24 Journals: "We are using a Robinson 3-pair roller mill for grinding now, and probably will for some time to come. We bot a new motor-driven 80-bu. capacity feed mixer, which is the only piece of new equipment we have bot so far. We will mill commercial flour and feed and do custom mixing. W. M. and W. E. Prather, of the Prather Creamery Co., own the property, and A. F. Cope, a miller of 15 years' experience in the mills at Bloomfield, Mo., is our miller and feed man.—By W. M. P."

## KENTUCKY

Lebanon, Ky.—George J. Begemann has bot the mill of the late G. A. Dahoney, and his two sons, Otto and George, Jr., will operate it, doing all kinds of custom grinding.

Benson (Frankfort p. o.), Ky.—The old-time water mill, known locally as Conway's Mill, has been restored at the old mill site on Benson Creek, near here, and grain is now being crushed and ground.

Sturgis, Ky.—William W. Wynns, 62 years old, flour and feed mill operator, died at his home here on Mar. 18, having been sick since last December. He organized the Farmers' Warehouse Co. and the Sturgis Electric Flour Mill and was interested in both at the time of his death.—W. B. C.

Louisville, Ky.—Rees H. Dickson, 38 years of age, son of the late Frank C. Dickson, general manager of the Kentucky Public Elevtr. Co., has been named general manager of the elevator company to succeed his father, who died Feb. 23. Mr. Dickson some years ago served the company for a period of years, but more recently has been managing the Kentucky Silica Sand Co., at Tip Top, Ky., producers of glass makers' sand, and representing a company in which his father was financially interested. Mr. Dickson has recently been elected to the Board of Park Commissioners.—A. W. W.

## LOUISIANA

Niblett, La.—D. C. Ritchie, manager of Niblett Farms, Inc., has let the contract for the rebuilding of the rice warehouse that burned last fall. The new warehouse will be 70 x 160 feet, and about 40 men will be employed in its construction.

Shreveport, La.—After an illness of several weeks with the flu, W. B. Farrar, head of the Fowler Commission Co., one of the largest feed and flour jobbers of the South, died Mar. 13, at his home in this city. Mr. Farrar was widely known thruout the southern part of the United States, and was familiarly known as Captain Farrar by his friends.

MARYLAND  
BALTIMORE LETTER

George A. Kublin, district manager of the Farmers' National Grain Corp., has applied for membership in the Baltimore Chamber of Commerce.—R. C. N.

The annual meeting of the Baltimore Flour Club will be held Apr. 2 at the summer home of A. W. Mears, former pres. of the Baltimore Chamber of Commerce, on the Middle River.—R. C. N.

The Baltimore Chamber of Commerce, thru Pres. Eugene Blackford, has advised Maryland senators and representatives in Congress that it is heartily in favor of a congressional investigation of the Farm Board and farmer-owned co-operative organizations, and would welcome any investigation of the grain trade itself.—R. C. N.

Louis Muller, the oldest member of the Baltimore Chamber of Commerce, and who was for years engaged in the export grain business here, sustained a broken hip in a fall Mar. 12.—R. C. N.

At the regular monthly meeting of the board of directors of the Baltimore Chamber of Commerce, Mar. 14, all of the grain elevators at this port were declared "regular" for the coming year.—R. C. N.

The annual auction sale for the choice of grain sample tables on the trading floor of the Baltimore Chamber of Commerce will be held on Monday, Apr. 4, with Sec'y Jas. B. Hessong acting as auctioneer.

Chester L. Weeks, until recently district manager of the Farmers' National Grain Corp. in Baltimore, is now making his headquarters in Chicago, where he will assist in the distribution of the 40,000,000 bus. of wheat allotted by the Government to the Red Cross.—R. C. N.

Blanchard Randall, Jr., former pres. of the Baltimore Chamber of Commerce, who is the Maryland chairman of the Citizens' Reconstruction Organization, whose purpose it is to conduct an educational campaign to set forth the evils of hoarding money, has named the following members of the Baltimore Chamber of Commerce to assist him: George S. Jackson, Eugene Blackford, E. H. Beer, Henry M. Warfield and Ferdinand A. Meyer.—R. C. N.

## MICHIGAN

Hastings, Mich.—George Fingleton is the new manager for the Hastings Co-op. Co.

Covert, Mich.—E. C. Vandebough has installed an all-steel corn cracker and grader.

Detroit, Mich.—A. K. Zinn & Co. have installed lightning rod protection on their Dix Ave. feed warehouse.

Woodland, Mich.—The Woodland Farm Buro has installed an electro-magnetic separator to catch tramp iron.

Stephenson, Mich.—The Bruemmer grist and flour mill, which has not been in operation for two years, has been razed.

Hudson, Mich.—P. Krieble, who operates a feed mill, has recently replaced his engine power with a 30-h.p. electric motor.

Onsted, Mich.—Franklin Branch, of H. E. Branch & Son Elevtr., has completed a building to be used as a chicken hatchery.

Kinde, Mich.—The Kinde Farmers Elevtr. Co. has installed a new Bryant built-in electro-magnetic separator on its Bryant mill.

Detroit, Mich.—The Detroit branch which General Mills, Inc., discontinued last May has been re-opened, with H. J. Myers as manager.

Kaleva, Mich.—The Kaleva Produce Co. has installed a feed mixer with a 5-h.p. motor and has also installed a duplex corn cracker and grader.

Chesaning, Mich.—Wind tore off some of the roofing on the bean elevator and also loosened up the roof on the coal shed of the Michigan Bean Co. on Mar. 6.

Linwood, Mich.—The Linwood Bean & Grain Co.'s elevator burned early Sunday morning, Mar. 13; it was a total loss. The origin of the fire was not known.

Port Huron, Mich.—A. L. Chamberlain, head of the Chamberlain Bean Co., of this city, was married, on Feb. 2, to Mrs. Elizabeth A. Cady, also of Port Huron.

Hudson, Mich.—The Hudson Milling Co. will handle a complete line of field seeds this spring. The new manager, Alex Russell, traveled for a large seed house for several years. Some improvements are being made at the company's plant, including a display window.

Cedar Springs, Mich.—Ernest A. Remer, a prominent business man here for 45 years, and who had operated a grain and bean elevator, died Feb. 26, aged 71 years. He suffered a stroke a year ago and never recovered. He is survived by a son, Donald J. Remer, who succeeds his father as a director of the bank. Mrs. Remer died several months ago.

Adair-Morton Grain Co.

Wichita, Kansas

WHEAT-CORN-OATS-KAFIR



Lake Odessa, Mich.—The Geo. Kart Flouring Mills have installed a new Bryant spout type electro-magnetic separator on their Bryant mill.

Six Lakes, Mich.—The potato warehouse of the Six Lakes Marketing Ass'n, which operates an elevator, was destroyed by fire, supposedly caused by stove, on Mar. 7.

Plainwell, Mich.—Johnson & Beattie, who operate a feed mill, have placed their order for a spout type Bryant Electro-Magnetic Separator to be attached to their Bryant feed mill.

Port Huron, Mich.—The E. B. Miller Chicory Mills have installed two Bryant electro-magnetic separators, one on an attrition mill and one on a roller mill to eliminate the tramp iron fire hazard.

Sumner, Mich.—Earl E. Jones, who recently took over I. N. Taylor's plant, is doing some remodeling. An electro-magnetic separator will be installed ahead of the feed mill to eliminate the tramp iron fire hazard.

Scottville, Mich.—Miller Bros.' elevator burned Mar. 9 shortly after the owners had locked up for the night, at 6 o'clock; loss, \$5,000; partly covered by insurance; 600 bus. of grain was destroyed, including wheat, rye and oats.

Udby, Mich.—On Mar. 6 sheeting on the outside of the elevator of the Bad Axe Grain Co. was burned from the floor almost to the eaves and some of the cribbing was burned by fire caused by an overheated pipe which runs from the furnace to the chimney.

Bellevue, Mich.—Two local elevators are reported to have submitted a request to the village council for a reduction in power rates, which, it is claimed, will enable them to reduce the price of feed grinding in order to compete with the portable feed mills. Elevators operating at this point are those of the Bellevue Co-op. Elvtr. & Warehouse Co. and of the Bellevue Milling Co.

Fenton, Mich.—A 40-h.p. fully-enclosed pipe-ventilated motor operating the hammer mill in a local plant, recently burned out due to a defect in the windings. Because the motor was of the fully-enclosed type, no fire was communicated to the plant and hence there was no damage except to the motor. Fully-enclosed motors are the only safe type to use in grain elevators and flour mills.

Perrinton, Mich.—The Perrinton Elvtr. Co., which is owned by the Little Rock Lbr. & Coal Co., of Alma, has purchased the hammer mill and molasses mixer equipment formerly used in the Clare Redmond feed mill at Alma which has been closed for six months. The mill is driven by a 50-h.p. Fairbanks-Morse direct connected motor and equipped with a built-in electro-magnetic separator.

Ravenna, Mich.—The Ravenna Incorporated Butter Co. has recently increased its storage capacity at the local elevator by adding a warehouse, 40 x 26 x 12. It has also recently added a motor-driven air compressor for furnishing a supply of compressed air for blowing the dust out of the motors and has also installed a motor-driven electric pump to furnish the water supply for wetting down cars of coal before unloading.

Lapeer, Mich.—The Lapeer Grain Co. has become the Lapeer Grain Co., Inc.; officers are: Pres., Wm. Surtees; vice-pres., M. D. Chance; general manager and sec'y-treas., Mrs. Mae Metheney, who is the majority stockholder. Mrs. Metheney has been with the Lapeer Grain Co. for 17 years as book-keeper and feed and soil expert; Mr. Surtees has handled the elevator work for 31 years; Mr. Chance has been a Purina salesman for the last six years. The present Lapeer Grain Co. elevator was built in 1904 by George Churchill and John Smith, partners, who later dissolved the partnership, Mr. Smith taking the elevator at Elba, which they operated, and Mr. Churchill taking the Lapeer business. Mr. Churchill died Dec. 24, 1931.

## MINNESOTA

Mahnomen, Minn.—Robert Burkner has purchased Jerry Flicek's flour mill at this point.

Veseli, Minn.—E. J. Tuma has opened a new custom mill here.

Echo, Minn.—The Echo Milling Co. has installed a magnetic separator.

Ihlen, Minn.—A magnetic separator has been installed by the Farmers Co-op. Stock Co.

Ceylon, Minn.—A magnetic separator has been added to the elevator equipment of Neal Bode.

Nelson, Minn.—Johnson Bros. Feed & Grain Co. recently installed a magnetic separator with rectifier.

Jordan, Minn.—The Jordan Feed Mill has installed a new feed mixer. H. E. Young is the proprietor.

Isanti, Minn.—A magnetic separator has been added to the equipment of the Isanti Co-op. Produce Co.

Holloway, Minn.—A magnetic separator has reduced the fire hazard at the Holloway Market Co.'s plant.

Ada, Minn.—The fire hazard has been reduced at the Ada Elvtr. Co.'s elevator by the installation of a magnetic separator.

Angus, Minn.—The equipment of the Angus Farmers Elvtr. Co. has been protected by installing a magnetic separator.

Bovey, Minn.—John Boyhtari has been appointed manager of the Farm Service Stores, Inc.'s warehouse, succeeding Frank Kangas, resigned.

Fairmont, Minn.—S. O. Leslie, of St. James, has opened an office here and will operate a new grain concern known as the Leslie Grain Co.

Danube, Minn.—Henry G. Schimming, manager of the Danube Farmers Elvtr. Co.'s elevator, died unexpectedly at his home here early this month.

Cambridge, Minn.—The Cambridge Mill & Feed Co. has just installed a new attrition mill, equipped with a magnetic separator to take the iron out of the feed. Poultry and dairy rations will be manufactured.

Jordan, Minn.—The Jordan Elvtr. Co. is the new owner of the upper elevator, as it is known locally, formerly owned by the International Milling Co. W. J. Schmitt is manager.

Miloma, Minn.—Daryl Warner, a youth of 20, of Artesian, S. D., has been charged with the theft of a rifle, which it is said he took from the wall of the office where it was hanging, when he went into the elevator office of the Farmers Elvtr. Co. to telephone, when he was en route from Artesian to Bingham Lake, Minn. He has been held to the district court in bail of \$1,000.

St. Paul, Minn.—The new feed mill of the Farm Buro Service Co., a unit of the Minnesota Farm Buro Federation, is expected to be ready to operate soon after the middle of April; the plant is now manufacturing fertilizer. The company will sell only to dealers approved by the Federation. A complete line of stock and poultry, as well as mineral, feeds will be manufactured at the new plant.

Waseca, Minn.—The Waseca Flour & Feed Warehouse has awarded contract to the T. E. Ibberson Co. for the erection of a complete new feed mill unit and warehouses. The feed mill unit will be a combination elevator and feed mill building, a cribbed structure having 9 bins and a cross work-floor. There will be two legs. A Monarch 24-inch Attrition Mill, scalpers and magnetic separators, a Sprout Waldron Vertical Feed Mixer and a 60-bu. Fairbanks Hopper Scale will be installed. A special driveway will be constructed for serving the customers feeds in bulk. A large warehouse will be attached to the feed mill building and an office building will be built. All of the buildings will be covered with galvanized iron. Power will be furnished by motors, and this building will be on the Northwestern right-of-way. All materials have been ordered and work will be started at once.

## MINNEAPOLIS LETTER

Harry G. Cowan, Spencer Kellogg & Son's district manager at this city, recently underwent an operation for appendicitis. At last reports he was getting along in fine shape.

The Russell-Miller Milling Co. has transferred S. S. Stanchfield, who has had charge of the company's feed department here, to its New England sales office and has appointed William C. Pratt as his successor here.

Charles E. Lewis, head of Charles E. Lewis & Co., grain and stock brokerage firm, of which he was the founder, died Mar. 14, at his home in this city, from pneumonia. He had also had heart trouble for some time. Mr. Lewis, who was 73 years of age, came to Minneapolis in 1881, entering the brokerage business soon thereafter and seven years later establishing his own company, which held memberships in the Chicago Board of Trade, Minneapolis Chamber of Commerce and many other exchanges. He is survived by his widow.

Altho his health had not been the best for the last two or three years, still the unexpected passing of Charles D. Junkin, general manager of the St. Anthony & Dakota Elvtr. Co., of this city, came as a great shock to his friends. On Mar. 14 he was at the office as usual and on Mar. 15 he died. About 50 of his 69 years of life were spent in the grain trade of the Northwest. He became a county agent for the St. Anthony & Dakota Co. in 1893, later being made traveling superintendent, and about 25 years ago being transferred to Minneapolis as assistant general superintendent. He was made general manager a few years ago. He is survived by his wife and six children.

## MISSOURI

Green Castle, Mo.—J. L. Hofmaster has installed a hammer mill in his produce house.

Bolivar, Mo.—The Akard Milling Co. has recently been taken over by F. E. Payne and E. J. Mahaffey.

Bourbon, Mo.—The Farmers Exchange has installed a hammer mill for feed grinding. Electric power is used.

St. Joseph, Mo.—Dannen Hay & Grain Co. recently moved its office location to the Missouri Valley Trust Co. Bldg.

St. Joseph, Mo.—A. J. Brunswig, of the Brunswig Grain Co., has recovered from a major operation and is now at his office regularly.

Vandalia, Mo.—Ed Sandbothe, manager of the Vandalia Farmers Elvtr. & Supply Co., has resigned, to take effect Apr. 1. He has had this position for several years.

Wellsville, Mo.—James P. Rodgers has been appointed manager of the Leader Milling & Elvtr. Co., succeeding William Ross, who resigned recently to move to his farm near Middletown.

Shelbina, Mo.—The Farmers Produce Co. has bot the Morgan Bldg. and moved into it. Both the mill and exchange will be under the same roof. A grain elevator will be installed for storage purposes.

Guilford, Mo.—The Guilford branch of the Farmers Elvtr. Co. of Barnard, Mo., was closed on Mar. 1. This was a co-operative business that operated for several years at a loss, and in 1927 was taken over by the Barnard Farmers Elvtr. Co. as a branch.

Humphreys, Mo.—E. H. Raney has bot the grist mill formerly owned by Smith Bros. and has installed it in one corner of his garage building. All kinds of feed and cornmeal will be ground. Mr. Raney will be assisted in operating the mill by his two sons, Edison and Ivan.

Seneca, Mo.—The Lawson feed and flour mill burned Mar. 1; loss, together with that of a residence across the street, \$10,000; no insurance; the mill contained a considerable quantity of feed and flour at the time of the fire. It is reported that Mr. Lawson does not intend to rebuild.

Barnett, Mo.—The Farmers Elvtr. Co.'s office was one of four business places robbed during the night of Feb. 25. After using dynamite to open the safe, the intruders found the money had been removed. Their night's work netted them only 35 cents. Bloodhounds were brot from the state prison and put on the trail and fingerprints were obtained from two of the places robbed.



Mexico, Mo.—The Producers Grain Co. has appointed Emmett J. Mundy manager of its elevator, and he assumed his new duties Mar. 1. He will also continue as manager of the Farmers Shipping Ass'n.

#### KANSAS CITY LETTER

Suffering from an eye infection, C. W. Pershing, assistant sec'y of the Kansas City Board of Trade, has been confined to Menorah Hospital, this city, for some time.

J. J. Wolcott, pres. Wolcott & Lincoln, Inc., on his return from a recent trip to countries on the Caribbean Sea was compelled to enter the Research Hospital here, where he underwent a major operation. He is reported as improving nicely.

Business has been discontinued by the General Commission Co., manufacturer and distributor of mixed feeds and jobber of millfeeds. The principal owner of the business, C. L. Fontaine, Jr., will take a rest of several weeks in Texas.

William A. Croysdale, a member of the Kansas City Board of Trade for many years, died on Mar. 17, at a local hospital where he was operated on Mar. 6. Mr. Croysdale, who was 63 years of age, was engaged in the grain business here from 1890 until 1916.

Julian Scott, of the Uhlmann Grain Co., recently had a narrow escape while returning from New York by airplane. A wind current caught the plane, while crossing the mountains, and badly tilted it for a while. The pilot was compelled to return to Harrisburg, from whence the passengers took a train, afterwards taking an air plane.

Harry T. Fowler, founder of the Fowler Commission Co. of this city, and a member of the Board of Trade for many years, died at the Sale Hospital in Neosho, Mo., Mar. 9, after an illness of about a week. Mr. Fowler dissolved his company on retirement four years ago, and had been spending the winter on his farm near Sulphur Springs, Ark. He was 66 years of age. Two sons, H. A., a member of the local exchange, and C. E., also of this city, and a married daughter, survive him. Funeral services were held from the home in this city on Mar. 11, burial being in Forest Hill Cemetery.

Much of the wheat in the Kansas-Missouri Elvtr., operated by the Hall-Baker Grain Co. as subsidiary of the Farmers National Grain Corp., that was damaged by fire and explosion last month, as previously reported, has been salvaged, tho badly damaged by fire, smoke and water. Up to two weeks ago, a total of 141 cars of wheat had been taken from the damaged portion of the elevator and sold at from \$5 to \$25 a car, being the most seriously damaged grain, and was sold for feeding purposes. At that time, 35 cars of wheat were being taken out daily. About 100,000 bus. was later taken out and was expected to sell at 5 to 20c under the basic May future in Kansas City. Oscar T. Cook, manager of the Wyandotte Elvtr. Co., appointed by the insurance company interests, directed the merchandising of the wheat. A new headhouse is to be built at once, at the reported cost of \$1,000,000 including the machinery. The handling capacity of the 6,000,000-bu. elevator will be approximately doubled by the new headhouse. Up-to-date car dumpers will be installed. Construction will be completed in time for the new crop. Edwin Ahlskog has the contract for the design and construction.

#### MONTANA

Homestead, Mont.—Farmers Elvtr. Co. has installed a Dreadnaught Magnetic Separator.

Denton, Mont.—The Montana-Dakota Elvtr. Co. has closed its local house until the next crop season arrives.

#### NEBRASKA

Cedar Creek, Neb.—Edward Kelly has been appointed manager of the Farmers Elvtr. Co.'s elevator.

Cozad, Neb.—The Alfalfa Supply Co., recently organized here (as reported in the Feb. 24 Journals) by W. J. Thurman, who is the owner and manager of the business, does not operate a feed mill. It is engaged in the wholesale alfalfa hay business.

Superior, Neb.—The elevator plant of Bossemeyer Bros. was slightly damaged by windstorm on Mar. 4.

Kearney, Neb.—It is rumored that a new 500,000-bu. terminal elevator will be erected here by the Farmers National Grain Corp.

Cambridge, Neb.—The Farmers Co-op. Union Elvtr. has been repaired and is now in operation. Ray Wilmot is the manager.

Eustis, Neb.—J. M. Sill, elevator manager for the C. B. Seldomridge Elvtr., was fatally injured early this month, when crushed between a truck and dump.

Barneston, Neb.—Barneston Farmers Elvtr. Co., incorporated; capital stock, \$10,000; incorporators: L. G. Brownawell, Roy W. Howe and Frank Malicky.

Falls City, Neb.—Equipment for manufacturing whole wheat and also wheat bran breakfast cereals may be installed by the Falls City Milling Co. soon.

Bushnell, Neb.—The Farmers Union Co-op. Ass'n has sold out to the Farmers National Warehouse Corp.—C. E. Fenstrom, former manager Farmers Union Co-op. Ass'n.

Howard, Neb.—The old Siefken Elvtr., leased by the John F. Grosshans Grain & Lbr. Co., has been closed as there was not sufficient business to justify keeping it open.

Giltner, Neb.—The Farmers Elvtr. Co. has let the contract to W. H. Cramer Const. Co. for an up-to-date plant, on which work will soon begin. Both of the old plants are being wrecked.

Colon, Neb.—The Farmers Co-op. Elvtr. Co. has completed a new road paved with cinders from its elevator and warehouse extending over the railroad tracks into the main street.

Plymouth, Neb.—The large elevator on the Kilpatrick Bros. ranch four miles east of this city, burned on Mar. 5, together with a quantity of grain; loss, \$10,000. It is planned to rebuild the elevator.

Auburn, Neb.—The Auburn Flour Mill has been bot by Arthur Beatty, a miller from Omaha, who has made alterations, installed new machinery and is now operating it. The mill had been closed for a year, since the death of the former owner, James Taylor.

Woodlawn (Lincoln p. o.), Neb.—The Hall-Johnston Grain Co.'s elevator, reported burned in the Journals last number, contained 3,000 bus. of grain at time of the fire; the \$12,000 or more loss was covered by insurance; much of the office equipment and records in the elevator was removed and other records in the safe were believed to be intact.

Alliance, Neb.—George Neuswanger's elevator, which has been built only about four years, sustained a serious fire loss on Mar. 3; about 50,000 bus. of grain was reported destroyed. The fire was principally confined to a large potato warehouse attached to the elevator. Indications are that the fire was started in some way by the heating apparatus. The structure will be rebuilt.

Pierce, Neb.—The mill and elevator here owned by the S. F. Gilman Mill Co., of Neligh, Neb., burned shortly after midnight on Mar. 1; loss, estimated at about \$35,000; as the plant was idle, no insurance was carried. J. W. Spirk, vice-pres. and general manager of the company at Neligh, writes: "Our mill at Pierce burned. This was a modern mill and one of the best plants in Nebraska, but has not been in operation the past few years. There is no doubt that the fire was incendiary. We have no intention of rebuilding the mill. Our mill in Neligh is in operation."

#### NEW ENGLAND

Quincy, Mass.—Death came to H. Everett Crane, treas. of the F. H. Crane Co., grain and feed dealers of this city, while he was at work in his office recently, heart failure being the cause. He was 62 years of age.

Boston, Mass.—Frank W. Wise, treas. of the Boston Grain & Flour Exchange since it was organized, was congratulated by his friends on the exchange and in the trade on Mar. 8, which marked the 82nd milestone of his life.

Ware, Mass.—The Cutler interests, grain merchants, have bot the long-established grain business of D. F. Howard & Sons and are consolidating it with their own business, operated as the Ware Grain & Coal Co. Samuel D. Howard disposed of the business on account of poor health.

Worcester, Mass.—Meeting here recently the New England Grain Dealers Ass'n re-elected Harry L. Ryther, Belchertown, Mass., pres.; W. T. Abell, Burlington, Vt., vice-pres.; Lynne P. Townsend, Springfield, Mass., sec'y-treas. New directors are E. W. Latimer, South Coventry, Conn.; J. H. Morrill, Laconia, N. H.; H. S. Winslow, New Bedford, Mass., and Eugene L. Millett, Mt. Vernon, Me. Re-elected were Frank G. Cover, Lowell, Mass.; H. G. Manchester, Winsted, Conn.; G. H. Stearns, Johnson, Vt.; A. W. Braisted, Bennington, Vt., and Geo. Emerson, Farmington, N. H.

#### NEW YORK

Dalton, N. Y.—A Unique 1-ton 4-in-1 Batch Mixer is being installed in the Ray Baker feed mill.

Gainesville, N. Y.—Wilson & French's feed mill and retail business has been bot by L. S. Duggan.

Rock Glen, N. Y.—Anthony Vigneri is installing a batch mixer and a 3-h.p. G. E. Motor in his feed mill.

Buffalo, N. Y.—Friends of Harold E. Tweeden, local manager for the Cargill Grain Co., will be glad to know that he is recovering from his recent illness.

Warsaw, N. Y.—Montgomery Bros. are installing a molasses mixer and a Fairbanks-Morse 7½-h.p. fully-enclosed self-ventilated motor in their feed mill. Two 5000-gal. wooden tanks are being used for storage of molasses.

Albany, N. Y.—The Albany Port District Commission will receive sealed proposals at 12:30 p. m., Apr. 14, for the contract for the construction of its re-inforced concrete, fire-proof terminal elevator of 2,500,000 bus. capacity. The structure is to be built south of Grain Elvtr. No. 1, along the pierhead line on the Albany side of the port harbor. The structure shall be so designed that uninterrupted rail and vehicular facilities will prevail between the structure and the water front to afford free movement for rail and vehicular traffic on the Port Terminal Railroad trackage and roadways. Provision must be made for the movement of all kinds and classes of grain in and out, between the elevator structure and ocean-going or Barge Canal craft at the waterfront and between the elevator structure and railroad cars. The elevator shall include complete equipment customarily installed in such a unit and be adaptable to its waterfront design and construction to a timber type platform. In the workhouse, storage bins shall be of self-cleaning type; conveyor shall include car shovels, passenger elevator and manlift; two 2,500-bu. shipping scales adaptable, if found advisable, for both receiving and shipping and provided with adequate shipping bins. If separate receiving scales are proposed, they shall be of not less than 400 bus. capacity per dump. Car and water craft moving equipment shall consist of capstans on the waterfront and car pullers along the rail trackage receiving and unloading facilities. Marine legs, loading galleries and spouts shall be so planned that movement of grain may be had simultaneously from and to barges and/or ships. A complete electrical signal system shall be installed with switchboard in a separate room. A suitable office building, separate from the elevator, shall include sanitary conveniences for employees, with one floor devoted to general office, superintendent's office and testing room. Weighman's office, foreman's office, electrician's storeroom, master mechanic's storeroom and such other quarters in the main elevator building shall be provided at a suitable location. The structure is to be completed and the complete equipment installed ready for occupancy by Oct. 15, 1932.



Albany, N. Y.—A hearing was held on Mar. 2 before the senate judiciary com'te on legislation to set up agricultural credit corporations for the financial relief of farmers, which was attended by grain dealers and feed manufacturers, who were represented later in the daily press as opposing relief for farmers. Their opposition was not to the legislation but to the form of certain bills that appeared to grant special favors to co-operative ass'ns that would enable them to obtain funds to use in opposition to the business of private concerns. Grain and feed men are not opposed to aid given to farmers, but they do object to aid being given only to the pools. Their contention is that all farmers, not a favored few, should be aided.

#### NEW YORK CITY LETTER

John C. Juhring, a member of the Produce Exchange for many years, died Mar. 10, from a heart attack, at the age of 83 years.

George Slocovich, a well known member of the Produce Exchange and active in its affairs up until a few years ago, died Mar. 4, at the age of 90 years.

Recent new members of the Produce Exchange include G. M. Bryan, C. C. Dunaif and O. G. Jennings. New associate members are Alexander Blum and Edward Weismann.

Henry M. Bogert, a member of the Produce Exchange for 51 years, died Mar. 5, at the age of 76 years. He was the head of Bogert & Greenbank, flour commission merchants, retiring from active business three years ago.

#### NORTH DAKOTA

Melville, N. D.—Ed. Alfsen has installed a magnetic separator.

Buxton, N. D.—A magnetic separator has recently been installed by the Buxton Grain & Potato Co.

Berlin, N. D.—The equipment of the Equity Elvtr. & Trading Co. has been improved by the addition of a magnetic separator.

Jud, N. D.—A. M. Nelson has sold his elevator to N. J. Rodenberg, of Kelso, formerly manager of the Equity Elvtr. & Trading Co. at that point.

Pillsbury, N. D.—On Mar. 1 elevator No. 1 of the Pillsbury Elvtr. Co. was slightly damaged by fire reported as having been caused by exhaust pot.

Cathay, N. D.—The Farmers Co-op. Elvtr. Co.'s elevator has been sold to the Farmers National Warehouse Corp. Fred Drummond has been retained as manager.

Coteau, N. D.—The Farmers Elvtr. Co.'s elevator that burned about 10:30 p. m., Feb. 22, was the second farmers elevator in Burke County to burn within two weeks, the first one being the elevator at Columbus, on Feb. 9, reported in the Feb. 24 Journals. The elevator here was one of two owned by the farmers company in Coteau, and at the time of the fire contained about 8,000 bus. of seed wheat, also two carloads of screenings; loss on the building, about \$13,000; building and wheat both covered by insurance. The fire started in the office building to the south of the elevator, and had consumed that part before it was discovered. Officers of the company are reported to have stated that there had been no fire in the office building all day and the only origin that could be given was defective wiring. The St. Anthony & Dakota Elvtr. Co.'s house was only saved by great effort, as it lay in the path of the flames.

Gronna (Rolla p. o.), N. D.—Stockholders of the Gronna Equity Elvtr. Co. have voted in favor of dissolution of the corporation and its immediate liquidation. The company's 35,000-bu. elevator burned last December.

#### OHIO

West Milton, O.—A feed mill has been opened here by Vore & Shelley.

Wilmington, O.—Buckley Bros. have installed a new Sidney Corn Sheller.

Lodi, O.—The Lodi Equity Co. sustained slight windstorm damage recently.

Apple Creek, O.—Wind damaged the roof on the mill of Studer Bros. on Feb. 11.

Cardington, O.—The elevator of L. S. Russell was damaged by wind on Feb. 11.

Reading, O.—Edward Koehl has added a feed mixer to his feed mill equipment.

Bradford, O.—A feed mixer was recently installed by J. R. Helman in his elevator.

Edgerton, O.—The Edgerton Farmers Warehouse Co. has improved its equipment by the installation of feed mixer.

Sommerville, O.—The roof and doors of the elevator of Edward C. Muff were slightly damaged by windstorm on Feb. 12.

McCutchenville, O.—The stockholders of the Seneca Grain Co. have decided to dissolve the old company and form a new one.

Emery Chapel (Springfield p. o.), O.—It is reported that a voluntary petition in bankruptcy has been filed by the Emery Grain & Feed Co., A. W. Tullis proprietor.

Wayne, O.—The Prairie Farmers Co-op. Elvtr. Co.'s elevator has installed a large 50-h.p. direct connected hammer mill, furnished by the Sidney Grain Mch'y. Co.

Waverly, O.—Andrew Trumpower and Ed Soldwisch, owners of the Waverly Feed Mill, contemplate rebuilding their plant which burned recently with a loss of \$14,000.

Newark, O.—The Vitafude Co. is the name under which Russell C. Younce is conducting his new feed business here. Mr. Younce was formerly in the grain and feed brokerage business.

Greenville, O.—A large frame building, containing 20 tons of hay and a quantity of grain, the property of the Greenville Feed Co., burned Mar. 14; loss, estimated at \$10,000.

Van Wert, O.—Scott E. Johnson, of Johnson & Gilliland, a grain dealer here for many years, died at his home on Mar. 14, at the age of 66 years. All the grain elevators in the city were closed for two hours during the funeral services.

Greenville, O.—A soy bean pancake flour is now being manufactured by the City Mills & Elvtr., (owned by the Barrett Milling Co.) which has installed the necessary machinery and equipment. The company experimented two years on the formula.

Lodi, O.—The Tyler Grain Co. has installed machinery in a new building, erected adjacent to its elevator here, and is about ready to operate a fertilizer factory. The plant will have a capacity of 75 tons per day and will operate steadily during the selling seasons.

Dexter City, O.—Feed milling operations have been resumed here after a lapse of several years. Guy Young and Frank and Cecil Worrall have installed a hammer mill in the Dexter City Mill Bldg., now owned by the Farmers & Merchants Bank of Caldwell, and are now doing a grinding business.

Okolona, O.—Okolona Grain Co. has just added to its equipment a McMillin Electrical Overhead Combination Wagon and Truck Dump.

Columbus, O.—The Ohio State Millers Ass'n will hold its 28th annual meeting in this city, Apr. 13 and 14, at the Hotel Chittenden. The speakers include Prof. H. C. Ramsower, director of agricultural extension at Ohio State University; H. A. Rettig, supt. of purchasing and printing for the State of Ohio; T. J. Haley, of the Haley Milling Co., Mansfield, O., and others. The banquet will be held on the evening of Apr. 13.—R. S. Willcox, sec'y.

Lima, O.—The Ohio Grain, Mill & Feed Dealers Ass'n will hold its 53rd annual convention at the Argonne Hotel, this city, June 28 and 29. The banquet will be held at the Eagles Club (formerly the Elks) on June 28 at 6:30 p. m. W. W. Cummings, sec'y of the ass'n, writes to members as follows: "We are working out the program and would like to have suggestions from our members. If you have any special subject that you would like discussed, please advise us at once so we can make proper arrangements to cover same."

Cincinnati, O.—H. Lee Early, pres. of the Early & Daniel Co., well known grain and feed dealers, especially in the Southeast, on Mar. 3 announced his retirement from active participation in the management of the company. Mr. Early recently celebrated his 75th birthday and the company has been in business 50 years. The directors of the company expressed their regret in granting his wish, and elected him chairman of the board. As a mark of the esteem in which he is held by his co-workers, the directors presented him with a loving cup. E. B. Terrill, Mr. Early's nephew, who has been with the company for 30 years, was elected pres.; Robert Lee Early, his son, formerly treas., was elected vice-pres., and E. J. Armbruster, sec'y, becomes treas. Emmert L. Daniel, son of the co-founder, succeeds Mr. Armbruster as sec'y.

#### OKLAHOMA

Jenks, Okla.—A new mill was recently bot by the Parker Feed Co.

Sharon, Okla.—A custom mill has been opened here by Huddle Mason.

Roosevelt, Okla.—Otto A. Bierman bot the Farmers Co-op. Elvtr. Co.'s property recently sold at sheriff's sale.

Porum, Okla.—Walter Wiley's mill at this point that burned some time ago, is being rebuilt and is expected to be in operation soon.

Mangum, Okla.—The elevator of the Mangum Milling Co., containing 2,000 bus. of wheat, burned Mar. 5; cause of fire not known; loss, \$15,000; covered by insurance.

Yukon, Okla.—John F. Kroutil, of the Yukon Mill & Grain Co., has been appointed by Gov. Murray as an Oklahoma delegate to the Democratic National Convention to be held at Chicago this summer.

El Reno, Okla.—We are contemplating the addition of a 50-barrel midget flour mill. Last year we added a molasses mixing process to our feed mill.—Farmers Mill & Grain Co., P. N. Kroeker, pres. and mgr.

Weleetka, Okla.—The Weleetka Mill, owned by B. F. Graves, burned at 2 a. m., Feb. 22; loss, \$8,500; partly insured. The fire apparently started on the inside and to the rear of the elevator near the corn sheller. About \$2,000 worth of feed stored in the mill and also a large car of feed that had been unloaded just a few days before the fire, were destroyed.

#### WARNING

Ohio grain dealers are warned that a man going by the name of J. W. Lane is calling on Ohio grain dealers claiming to represent the GRAIN & FEED JOURNALS and collecting for subscriptions without authority from us. We beg that any dealer approached by him will have him arrested and wire us. GRAIN & FEED JOURNALS, Consolidated, Chicago, Ill.

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**PACIFIC NORTHWEST**

Canby, Ore.—B. M. Randall is erecting a larger building for his feed manufacturing plant.

LaGrange, Ore.—The LaGrange Milling Co. sustained damage to its electrical equipment on Feb. 16.

Portland, Ore.—The Grain Exchange, at a special meeting held late in February, elected C. M. Wendell a director.

Medford, Ore.—The plant here formerly owned by Neeley & Morton, of Grants Pass, but leased for a time to the Mutual Mill & Feed Co., has been taken over by Oliver Morton, of Neeley & Morton.

Portland, Ore.—Mark P. Miller and his wife entertained 25 grain men of this city together with their wives, at their home Saturday night, Mar. 5. Refreshments were served after an evening spent mostly in dancing.

Portland, Ore.—Julius H. Lensch, pres. of Lensch Bros., feed dealers of this city, died very unexpectedly at his home, Mar. 12, after a few days' illness from heart trouble. He has been prominent in feed circles in this city and surrounding territory for years. He is survived by his widow.

Cheney, Wash.—Jobs seem to be plentiful with Clarence Martin. Besides being owner and manager of the F. M. Martin Grain & Milling Co., he was re-elected mayor of Cheney about two weeks ago, without any opposition, and he is a candidate for governor of Washington on the Democratic ticket.

Yamhill, Ore.—The mill of Zimmerman Bros. will be moved from the railroad track to the center of town, this summer, to a new building to be erected on recently bot ground. As most of the freight traffic in and out of Yamhill is by truck, it is no longer necessary for the mill to be located on a railroad.

Jerome, Ida.—Harry O. Carbuhn and other local people have purchased the business, plant and real estate of the Nicholas Seed Co., and are now conducting the business. The property includes a large two-story and basement brick building and a fully equipped plant for recleaning seeds and grains. The name of the company has been changed by the new owners to Jerome Seed Co. Mr. Carbuhn is pres. and will have active management of the business.—I. M. D.

Parma, Ida.—Alva Watts has recently installed new machinery for making sweet feeds and on Mar. 11 and 12 gave a demonstration to a large group of livestock owners, each day processing 500 pounds of feed with pure molasses free of charge. The mill is equipped with the sweet feed system, by the installation of which Mr. Watts will be able to give the farmer his own feeds properly ground, and almost any amount of molasses is put into the feed, according to the desire of the farmer.—I. M. D.

Iona, Ida.—The Colorado Milling & Elvtr. Co.'s plant, known locally as the Midland Elvtr. Warehouse and consisting of elevator, warehouse and office, burned at 8:30 p. m., Feb. 22; loss, about \$20,000; covered by insurance; three carloads of grain in the warehouse was also destroyed. The cause of the fire, which originated in the elevator, was not known but it was that it might have started by defective wiring or a hot bearing in the elevator, which was used the previous day to load two cars of grain. The structure was a state bonded warehouse.

**PENNSYLVANIA**

New Alexandria, Pa.—A feed mixer has been installed by the Hepler-McNaughton Milling Co., which is now making a specialty of mixed feeds prepared according to individual formulas.

Rothsville, Pa.—The grain and feed warehouse of Walter M. Zook & Son burned shortly after midnight, Mar. 1, in a fire that took a total of five buildings; loss to Zook & Son, \$40,000; large quantities of grain and feed, and several hundred tons of coal in the yard adjoining the warehouse, were destroyed.

Waterford, Pa.—Mark F. Briggs & Son recently installed a feed mixer in their feed mill.

**SOUTH DAKOTA**

Irene, S. D.—The Farmers Co-op. Stock Co. has installed a magnetic separator.

Waubay, S. D.—Peter Terhurne, former grain buyer at this point, died recently at his home at Altadena, Cal.—A. T.

Humboldt, S. D.—Norbett B. Maloney, prominent elevator and stock man of this community, died unexpectedly at his home three miles west of this point, early in March, at the age of 66 years. He was manager and partner in the firm of Betts & Maloney.

**SOUTHEAST**

Gulfport, Miss.—Mixed feeds are being manufactured by Donald and Mark Lytle, who recently organized a wholesale and retail feed firm.

Maben, Miss.—Walter Shuffield, because of increased business, has been forced to double the equipment of his grist mill. He has also added a feed crusher, which grinds corn, cob, shucks and everything into stock feed.

Birmingham, Ala.—Alex Cecil, Alabama Mill & Elvtr. Co. was elected pres. of the Birmingham Grain Exchange at a recent weekly luncheon. Dan Nunnally, of the Tennessee Mill & Seed Co., was chosen first vice-pres., Ralph Bradley, of Bradley Bros. Grain Co., second vice-pres.; B. Yielding, of Yielding Bros., treas., and Wade Wood, Jr., of Wood & Crabbe, sec'y. The report of the retiring president John Wood, will be presented at the next meeting.—G. H. W.

**TENNESSEE**

Midway, Tenn.—Thurman Essary has leased the Henly Runions Mill and is now doing a grinding business.

Nashville, Tenn.—The elevator of the W. R. Tate Co., Inc., was damaged by fire, on Feb. 27, to the extent of \$1,500; the stock of grain was damaged by water; partly insured.

**TEXAS**

Stratford, Tex.—Riffe Bros. started construction on Mar. 14 on the additional 250,000-bu. storage to their present concrete elevator at this station. The layout will consist of four 30-ft. tanks, 100 feet high, with a tunnel below and a gallery above; 22-inch belt conveyors will be used. Chalmers & Borton have the supervision and construction.

Kerrick, Tex.—We have awarded the contract to Chalmers & Borton for the erection of four concrete storage tanks 30 feet by 75 feet high to hold approximately 185,000 bus. These tanks will be built on the same order as our storage at Texhoma and Stratford and will be served with the present elevator which was erected last year. Under these tanks will be a tunnel 6 x 7 feet and above a gallery 12 x 8 feet, using 22-inch rubber belt conveyors. Work will start about Apr. 20 and be finished for this season's crop.—Riffe Bros. (Texhoma).

Fort Worth, Tex.—C. W. Harris, of Terrell, Tex., has been appointed traffic manager for the Burrus Mill & Elvtr. Co. here

Houston, Tex.—J. B. Hergens has become associated with the Sigmund Rothschild Co., Inc., in the import and feedstuffs department.

**UTAH**

Ogden, Utah.—A com'te, consisting of Charles J. Baker, P. M. Thompson, Milton G. Pence, E. R. Alton and Sterling H. Nelson, has been appointed to perfect plans for establishing a grain futures trading market here, the directors of the Ogden Grain Exchange having voted unanimously in favor of it.

**WISCONSIN**

Benton, Wis.—New Grist Mill recently opened at this point.

Hixton, Wis.—H. P. Chenoweth has installed a magnetic separator.

Rhineland, Wis.—Charles Olson & Son are the owners and operators of a new grist mill.

Montfort, Wis.—A hammer mill has been installed by John C. Kramer, Jr., in his elevator.

Van Dyne, Wis.—A number of men in the vicinity have purchased the old grain elevator and are wrecking it.

Tilden (Chippewa Falls p. o.), Wis.—The feed mill and power plant of Walter Bros. burned Mar. 14; loss, \$25,000.

Superior, Wis.—New equipment, representing an expenditure of \$12,000, will be installed by the G. H. St. John Feed Co.

Oregon, Wis.—The name of the Oregon Milling Co., Matt E. Edwards proprietor, has been changed to the Edwards Milling Co.

Arpin, Wis.—The building and 15 tons of feed were destroyed when the McKercher Milling Co.'s feed store burned in February; loss, \$2,000.

Milwaukee, Wis.—The annual election of the Milwaukee Grain & Stock Exchange will be held on Apr. 4. Nominations for officers and directors were made at the annual meeting held Mar. 19.

Janesville, Wis.—E. P. Doty, one of the oldest millers and grain dealers in this state, died on Feb. 29 at his home in this city, aged 74 years. He operated the Doty mill and elevator until two years ago, altho a great sufferer from rheumatism for years.

Milwaukee, Wis.—John B. Toner, former traffic manager for Taylor & Bournique, grain dealers, now out of business, died at the County Hospital, on Mar. 17, after an illness of 18 months. Mr. Toner, who was 66 years of age, retired three years ago. He was a resident of Milwaukee all his life. A son survives him.

The Corn Products Refining Co.'s net income for 1931 was \$10,700,775, compared with \$14,067,689 in 1930.

Kansas City, Mo.—The Grain Stabilization Corporation has sold 5,370,000 bus. of wheat, taking the December future in exchange at a premium said to be about 7 cents per bushel.

**FORT WORTH**

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**Smith-Ingraham Grain Co.**  
*Export and Consignments*

**Rosenbaum Grain Corp.**  
*Cash and Futures*



## Grain Carriers

Cars loaded with grain and grain products during the week of Mar. 5 numbered 31,373, against 41,553 during the like week of 1931.

**Seattle, Wash.**—The hay rate case, I. C. C. Docket 17000, part 10, will be reopened at a hearing here Apr. 9 at the Olympic Hotel by Examiners Worthington and Walsh.

**Chicago, Ill.**—Hearings on the re-opened Western grain rate case will begin here Apr. 5 in the Sherman Hotel by Examiners Arthur Mackley and George Hall of the Interstate Commerce Commission.

**Chicago, Ill.**—The Rosenbaum Grain Corporation has been granted judgment for \$25,045 by the circuit court at Chicago against the Burlington for overcharges on wheat for export, on the proportion between Kansas City and Omaha to Chicago.

**Washington, D. C.**—Regulation of all water rates, by the Interstate Commerce Commission, not only on the seaboard but on the inland waterways met hard sledding before the Senate Interstate Commerce Com'te and was referred back for the elimination of inland control.

**Tacoma, Wash.**—The proposed cancellation of export grain rates from Montana to the Pacific Coast will be opposed by the Tacoma Chamber of Commerce, and it is expected that the Seattle Chamber of Commerce and the North Pacific Millers Ass'n will join in the protest.

**Truck competition** is not the cause of poor railroad earnings says H. G. Parker of the Standard Statistic Co. He points out that altho the general production figures for the entire country are down 49 per cent from 1921 the freight revenues are down 44 per cent and the carloadings 38 per cent. It is the depression and not competition that has taken its toll of the railroads.

**Ottawa, Ont.**—Grain freight rates in Western Canada were discussed in the House of Commons recently, R. J. Manion, minister of railways and canals, speaking vigorously in defense of the carriers, asserting reduced rates would cause heavy loss to the roads. He stated that the rate from Brandon, Man., to Fort William, Ont., was 16c for 552 miles, compared with the rate from Boyle, N. D., to Duluth, Minn., 27c for 553 miles.

**The California Railroad Commission** in docket No. 3145 is holding hearings on the competitive status of common carriers by water, rail and truck. The chairman of the transportation com'te of the California Hay, Grain & Feed Dealers Ass'n, E. B. Smith, believes that taxation should not be used as a lever to accomplish any purpose in favor of or in opposition to the conduct of any agency of transportation.

**Chicago, Ill.**—Weight tolerances were the subject of a hearing here Mar. 11 and 12 by Examiner Fuller of the Interstate Commerce Commission. Henry L. Goemann, chairman of the transportation com'te of the Grain and Feed Dealers National Ass'n, tried to get grain in on the program but was ruled out, altho the regulation in question is general in its application. Specifically the proposed revision applies to coal and coke, ore, sand and gravel, and other bulky, heavy-loading commodities. The change would allow a tolerance of 1½ per cent on such commodities, that much difference in recorded weight being necessary before the carrier would be required to make a revision in the transportation charge or assume the expense of a second weighing requested by the shipper or receiver.

## Decisions and New Complaints

Before the Interstate Commerce Commission:

**No. 24788, Kellogg Grain Co. v. C. & N. W.** By Examiner T. Naftalin. Dismissal proposed. Rates, corn, points in Nebraska to destinations in Wyoming, not unreasonable or in violation of section 4.

**No. 24132, American Popcorn Co. v. A. T. & S. F.** By division 5. Dismissed. Rate and minimum weight, shelled popcorn, in packages, carloads, Sioux City, Ia., to destinations in California, Oregon, and Washington, not unreasonable.

**No. 20494, Great West Mill & Elevator Co. v. Panhandle & Santa Fe, Examiner Peterson** proposes that the Commission condemn as too low some of the rates prescribed in 164 I. C. C. 619, on grain from Texas and Oklahoma to New Mexico, alleged in the complaint to be unreasonable.

**No. 24650, Southern Cotton Oil Co. v. S. A. L.** By Examiner L. J. P. Fichthorn. Shipments, cottonseed, Rutherford and Prudence, Ala., to Columbus, Ga., found to have been misrouted by the S. A. L. Applicable

rates over the route over which the shipment should have moved found to have been 12 cents from Rutherford and 13 cents from Prudence. Those rates proposed to be found unreasonable to the extent they exceeded 11.5 cents. New rate and reparation of \$75.84 proposed.

**No. 22219, Seele Brothers Grain Co. v. C. & A.** By Examiner William G. Butts. Upon further hearing, rates, wheat, points in Indiana to Memphis, Tenn., proposed to be found inapplicable and reparation proposed. Former report, 163 I. C. C. 396, proposed to be modified. Rates proposed to be found applicable were 32.5 cents from Rolling Prairie and Wyatt; 32 cents from Teegarden; 30 cents from South Wanatah and North Hayden; and 34 cents from Syracuse and Nappanee.

**No. 23918, Bonlee & Western Railway Co. v. Atlantic & Yadkin Railway Co.** By division 3. Dismissed. Class rates and rates on grain and grain products between points on Bonlee & Western in North Carolina on the one hand and points in Virginia, West Virginia, Maryland, District of Columbia, Pennsylvania, New Jersey, New York, Ohio, Connecticut, Rhode Island, Maine, Massachusetts, New Hampshire, and Vermont, on the other hand; not unreasonable or otherwise unlawful. The Commission said it could not prescribe divisions on record. Commissioner Lee concurred in part.



Now if Congress Would Give the Balance of the Farm Board's Wheat to Charity and Give the Farm Board a Coat of Tar and Feathers and Run it Out of the Country all Producers Would be Delighted with a Prospect for Higher Prices.—With Apologies to the Toledo Times.



### Demurrage on Refused Shipments

Effective Mar. 15 by authority of the Interstate Commerce Commission the rule on refused shipments has been amended to provide:

#### Rule 4, Section E.

1. When carload freight is refused at destination this railroad shall, within 24 hours (exclusive of Sundays and legal holidays), after being advised of refusal, send notice of such refusal by wire to the consignor or owner when known, or, when not known, to the agent at point of shipment, who shall promptly notify the consignor, if known.

2. Except as otherwise provided in Note 1, when non-perishable carload freight has not been disposed of by this railroad and remains on hand undelivered at the expiration of 5 days (exclusive of Sundays and legal holidays), from the first 7:00 a. m. after the day on which notice of arrival has been sent or given to the consignee or party entitled to receive same, a notice to that effect shall within 24 hours thereafter be sent by wire to the consignor or owner when known, or when not known, to the agent at point of shipment, who shall promptly notify the consignor, if known.

Also, Demurrage Rule 8, Section D, Paragraph 4, has been amended to read as follows, effective Mar. 15, 1932:

In case of failure by this railroad to send notice in accordance with the provisions of Rule 4, Section E of tariff, as amended, the consignor shall not be held liable for demurrage charges between the date the notice should have been sent and the date it was actually sent; provided, that if, thru error, notice is transmitted by mail instead of by wire, this waiver of liability for demurrage charges shall terminate on the date such mailed notice is received by the consignor.

### Evils of Government in Transportation Business

The Government not only constructs the waterways, but prohibits the railroads from operating boats upon waters upon which the Government has its own vessels operating, and yet compels the railroads, under such laws as the Denison Act, to enter into joint rail and water rates, and thus to increase the territory from which water-borne traffic can be drawn, although prevented from engaging in the business itself. Although there is no reciprocity involved, railroads are compelled to grant to the water common carrier the benefit of reciprocal switching rates in moving material to and from water terminals.

Up to two years ago private capital had not ventured in the business of common carriage on these waterways. Since then two companies have commenced operations. Both are now operating on these waters. Both are losing money. It is not difficult to suppose that at least one reason why they are losing money is the competition of the government-owned Inland Waterways Corporation. What chance is there of the Government operation demonstrating the success of inland water transportation by competition with its own citizens engaged in the same business? At what stage are we to consider the demonstration concluded?—Edward J. White, vice pres. Missouri Pacific Railroad Co.

### For Uniformity in Protein Tests

Inspectors and chemists from the different offices of the Kansas state grain inspection department were in conference at Kansas City Mar. 13 to eliminate the difference in protein percentages on the same carload moving from one inspection point to another.

It was decided to standardize the procedure of making protein tests and to use similar and up-to-date equipment.

C. W. Winslow, first assistant at Kansas City, said there would be no discharging of efficient inspectors under the new chief, Jasper Kincaid, and that the inspection service will not be permitted to deteriorate.

### The Three Rusts of Wheat

By R. O. CROMWELL, *statistician, Lamson Bros. & Co.*

Different common names of a parasitic organism in use in different localities, caused confusion. Best usage distinguishes black stem rust, orange leaf rust, and yellow stripe rust as the rusts attacking small grains. All three of these rusts have red stages varying in shade of red, both within themselves, and one from the other; all three have black stages. All of them occur on the leaves, stems and heads. Black stem rust, the most damaging rust, as well as the most damaging of known wheat diseases, does considerable damage in some localities every year but, in some years, better than average yields are obtained in spite of it. This rust sometimes attacks the wheat plant early in life (in the leaf stage) but, usually, not until about time of heading. The red spore stage, which always on grains develop first, spreads from some other grains or grasses; or a different red spore spreads from a rusted common barberry leaf. The red stage of all rusts on wheat appears as rusty looking specks on the surface of the plant and thus derive the name rust. Infecting spores germinate in moisture on the surface of the plant, extend their germ tubes to reach a breathing pore, enter, elongate, branch, penetrate and kill the cells in a locally restricted area by using the food in the cells and by poisonous secretions. If infection is heavy on the stem, food supplies can not pass dead areas to reach and fill the kernels. Each red speck later becomes black from the development of a later spore stage with thick wall to carry the rust over unfavorable weather periods. These black spores must first infect the barberry in order to be able to infect wheat or grasses. Damage is done by the red stage and by the black but ceases soon after the black stage appears. Those who have the idea that damage is not done until the black stage is reached do not recognize damage until the patient is nearly dead. Damage naturally is more apparent as death approaches. A rust species may have numerous strains. Some strains will attack wheat, for example, but not oats; some will attack both wheat and oats, and some will attack certain wheat varieties but not attack others. Orange leaf rust and yellow stripe rust are not often damaging in much of the United States.

### From Abroad

A grain elevator, the only one of its kind in Ireland, has just been completed at Limerick docks for Bannatyne & Sons. Its capacity is 6,000 tons.

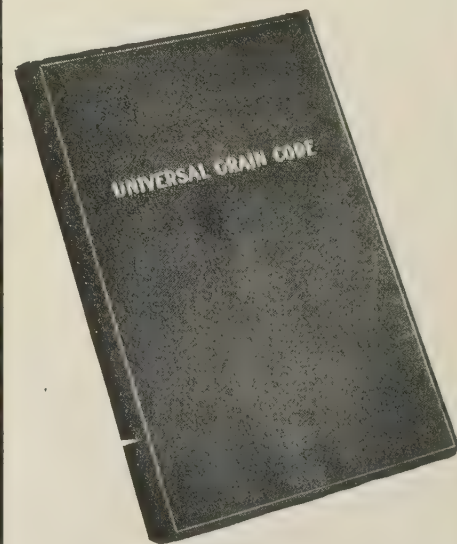
Famine is reported in the soviet republic, in the grain growing territory of the middle Volga, the Ural and West Siberia. Distribution of 1,000,000 tons of grain to the hungry has been ordered.

Britain's wheat quota contemplates payment by the millers of a variable tax on wheat ground, the proceeds to be distributed to the growers who will receive a guaranteed price of 45s, per quarter, equal to \$1.35 per bushel.

An additional 5 per cent of foreign wheat may be mixed with domestic wheat in France under a recent decree, making the foreign percentage 30. The agricultural committee of the French senate Mar 16 decided to suggest higher tariffs on rye, barley, oats and corn.

Jugoslavia's cabinet council announced Mar. 5 that the grain monopoly was abandoned as an economic failure. The government could not make good its guaranteed price to farmers for grain. Some dreamers recognize the folly of ignoring economic laws.

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In cutting your expenses have you taken into consideration your telegraph bill can be reduced at least one-half, at the same time your messages can be made more explicit? A true economy.

This can be accomplished by using the Universal Grain Code, a code designed expressly for the grain and feed trades; arranged alphabetically and contains no ambiguities. The Universal contains 14,949 code words for the entire range of present day trade terms, including words for U. S. wheat, corn and oats grades. Its simplicity and convenience of arrangement appeals at once to the progressive grain dealer as well as to the flour and feed miller.

Printed on durable bond paper, 150 pages, 7x4½ inches, substantially bound in flexible leather, Price \$3.00; weight, 5 ounces. BOOK paper, board covers, \$1.00 per copy, six for \$5.00, plus postage.

## Grain & Feed Journals

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## Supreme Court Decisions

Digests of recent decisions by State and Federal Courts involving rules, methods and practices of the wholesale grain, field seeds and feedstuffs trades.

**Stock Food Regulation Valid.**—Statute for regulation of stock foods and remedies held not invalid for requiring disclosure as to ingredients (Laws 1929, c. 238; Const. art. 6, § 1).—*State v. Reininger. Supreme Court of South Dakota. 239 N. W. 849.*

**Crop and Real Estate Mortgage.**—Crop covered by real estate mortgage, executed before chattel mortgage thereon, may be placed in receiver's hands to protect prior mortgagee (Civ. Code Prac. § 299).—*Northwestern Mutual Life Ins. Co. v. Stofer. Court of Appeals of Kentucky. 45 S. W. (2d) 1025.*

**Warehousemen.**—Where jury found that cotton stored with warehouseman for hire was destroyed by fire due to warehouseman's negligence, he was liable despite provision in receipt attempting to exempt himself from liability for loss by fire (Rev. St. 1925, art. 5632).—*Exporters and Traders Compress Co. v. Bargainer. Commission of Appeals of Texas. 45 S. W. (2d) 563.*

**Marine Loss.**—The motorship I. L. I. 105 with 61,200 bus. wheat grounded on a shoal in the St. Lawrence River and the owners of the ship, Erie & St. Lawrence Corp., brought suit against Barnes-Ames Co., owner of the wheat to recover insurance on general average, but the court decided against the vessel owner because the accident was due not to faulty navigation by the pilot but to failure of the steering gear.—*U. S. District Court, New York. 52 Fed. (2d) 217.*

**Carriers.**—Bill of lading stating goods were delivered to carrier in apparent good order makes prima facie case, in action against carrier for damages to goods, shifting burden to carrier (Carmack Amendment, 49 USCA § 20 (11, 12)). Carrier unable to deliver in condition in which goods were shipped cannot claim freight, and neither consignee nor shipper need accept goods. On carrier's refusal to accept freight only for undamaged goods or allow for damage, consignee justifiably declined to pay freight for entire shipment.—*Jefferson Macaroni Co. v. Pennsylvania R. Co. Supreme Court of New Jersey. 154 Atl. 188.*

**Demurrage on Cargo.**—Cargo owner's obligation to discharge ship at rate of 1,000 tons per running day held to mean, at least prima facie, that cargo should be taken out of ship at that rate, or that demurrage would accrue. It appeared that after voyage had begun, buyer of cargo and assignee of B/L sought to divert steamer in question, and shipowners consented under agreement by which shipowners were to pay not to exceed specified amount per ton for stevedoring, which was to include all extras, the steamer supplying only her steam and winches, and charterer was to discharge ship at rate of 1,000 tons per running day to avoid demurrage; it being agreed that time for discharge should commence when steamer obtained free pratique. Charter party provided that cargo should be brought to and taken from alongside at charterer's risk and expense, and cargo owner contended, therefore, that its undertaking was not to discharge ship at rate of 1,000 tons per running day, but merely to be ready to receive cargo alongside at that rate.—*Livanos v. Bisbee Linseed Co. U. S. District Court, New York. 53 Fed. (2d) 1054.*

**Sales.**—In action by buyer against seller for failure to deliver special kind of corn, evidence by seller as to scarcity of such corn was irrelevant but harmless. Where proof was undisputed that seller had failed to deliver corn sold, evidence as to acreage of corn seller had bought for purpose of filling contract was irrelevant.—*Frey & Son v. Magnus. Court of Appeals of Maryland. 157 Atl. 400.*

### Drawers of Draft Given Preference Against Collecting Bank

The Corinth Bank & Trust Co. agreed to permit overdraft by V. M. Carothers of Booneville, Miss., to finance his business of buying cotton.

Jones & Son and Burrow & Co., dealers at Saltillo, sold a large quantity of cotton to Carothers, depositing their drafts against Carothers with the Bank of Saltillo, which drafts were again forwarded to the People's Bank & Trust Co., of Tupelo, and then to the Corinth Bank & Trust Co. Waiting for 96 hours to elapse as required by law the Corinth Bank issued its draft on the First National Bank of St. Louis and forwarded it to that bank to be credited to the Tupelo bank, but this draft was received by the St. Louis bank after the Corinth Bank had been closed for liquidation and was not paid.

Carothers' cotton exceeded in value the amount of his overdrafts, and was held by the bank under warehouse receipts that the Corinth Bank employed as collateral for a loan of \$30,000 from the Chase National Bank, New York. This loan of \$30,000 was checked out before the Corinth Bank closed Nov. 28, 1930, so that the Corinth bank owed the Chase National \$125,000 in all.

Carothers paid the amount of his overdraft to the Chase National and secured the warehouse receipts for his cotton.

Jones & Son and Burrow & Co. brought suit against the superintendent of banks for a preference against the assets of the Corinth Bank, and were given judgment in full by the Supreme Court of Mississippi Jan. 25, 1932.—*139 South. Rep. 162.*

### Guilty of Plugging Cars

The Sec'y of Agriculture reports that three cars of wheat sold by the Riebs Co., Milwaukee, Wis., as No. 2 had been plugged by loading in the bottom from end to end of each car wheat that was distinctly different from and inferior to the wheat in the upper part of the carloads.

The low grade wheat was so well covered that the inspector was deceived and gave it a higher grade.

Cincinnati Board of Trade directors on Mar. 11 adopted a resolution urging investigation of the Federal Farm Board so that taxpayers may learn how their money has been wasted.

### An Improved Dump at Lower Cost

Acting on suggestions by users and taking advantage of the reduced cost of materials the manufacturer of a well known overhead wagon and truck dump has altered the design and lowered the sales price.

To accommodate the few users who desire racks instead of the more popular wheel hooks anti-skid racks now are supplied.

The trolleys, which support rack or wheel hooks, are carried on an I beam track and can be moved forward or backward to accommodate the different length vehicles. By extending the track, additional dump doors can be accommodated.

The power unit is constructed of an all-steel electrically welded frame which is clamped to the top of the track and causes the dump to be easily installed since all that is necessary is to provide the cross timbers for supporting the track. In this power unit is assembled the 2-h.p. ballbearing motor with roller bearing worm gear in head making the power reduction a very simple, positive, and efficient unit. On this frame is also mounted the shaft and drums.

This dump is supplied with a forward and reverse magnetic switch with push button marked "Raise" and "Lower." Where accommodating more than the one dump door, additional push buttons can be placed as desired.

This type of dump embodies the latest and most up-to-date features in dumps. It has ample capacity for the largest trucks and is a worthy successor to former dumps. Due to its design and simple construction, there are few, if any, locations where it cannot be successfully installed. The manufacturer, L. J. McMillin, will supply Journal readers additional information on request.



Improved Wagon and Truck Dump



## Supply Trade

"The only thing that has been sufficiently advertised in the past two years is the depression."—Roger Babson.

**Owatonna, Minn.**—F. E. Barsaloux, representing Howell & Co., has moved his headquarters to this city from Sioux Falls, S. D.

**Milwaukee, Wis.**—Allis-Chalmers Mfg. Co. has announced that its litigation in the federal courts with the Dayton Rubber Mfg. Co. over the Geist patent covering multiple belt drives has been settled out of court.

**Des Moines, Ia.**—Prospects for new elevator building and repairing old elevators is much better than for the last two years. We have a contract for one new elevator and several repair jobs and are receiving other inquiries that are quite encouraging.—Williams Construction Co.

**Chicago, Ill.**—In my opinion prospects are looking very good, so far as building of new grain storage is concerned. We have an unusually large amount of estimating for this time of year, and there is little question but what a number of the jobs will go ahead.—Geo. R. Basler, James Stewart Corp.

**Lincoln, Neb.**—Geo. H. Birchard, 74, who designed and constructed more than 100 grain elevators and many flour mills thruout this section, died Mar. 8. Altho he had not been active in the affairs of the Birchard Construction Co., which he founded many years ago, Mr. Birchard maintained his keen interest in better elevator construction. The company is now owned and operated by Bert Samson.

**Kansas City, Mo.**—Manufacturers of elevator machinery and supplies are said to be throwing their cost sheets to the winds and quoting prices on new machinery that leaves nothing but the freight to be paid by buyers. Taking orders and filling them just for the fun of it may prove exhilarating now but the flood of red ink later will be most distressing.

**Chicago, Ill.**—At the annual meeting of the National Scale Men's Ass'n, held Mar. 15 to 17 at the Hotel Sherman, it was voted that a com'te be appointed to draw up specifications for hopper scales. Officers elected for the ensuing year are E. D. Gordon, Buffalo, N. Y., pres.; A. S. Dodge, vice pres.; C. L. Richard, Chicago, sec'y-treas., and Frank E. Cruickshank and R. O. Rask, additional members of the executive com'te. The 1933 meeting will be held at Milwaukee.

**Minneapolis, Minn.**—Our impression of prospects for new grain elevators, repairs and improvements for this year is that there will be a fair amount of this work done over the different territories, in view of the fact that so much of this work has been deferred the last two years. Our reports indicate considerable moisture in the Northwest, which will give this section a favorable start off for a large crop. A good crop in the Northwest this season will bring about a big improvement in general conditions.—Fred Holtby, T. E. Ibberson Co.

### Annual Statement Western Millers Mutual

The Western Millers Mutual Fire Ins. Co., of Kansas City, Mo., had \$90,561,750 insurance in force Dec. 31. After incurring losses of \$208,422 during the year 1931 there was \$785,937 cash assets on hand, consisting principally of government and municipal bonds of a market value of \$706,861.

Since organization 49 years ago this company has paid \$2,802,982 in losses and saved policyholders \$4,017,292.

### How Fires Start in Elevators and Mills

Water barrels and buckets make a splendid showing in cutting down fire losses during 1931, according to the report of the Grain Dealers Fire Ins. Co. These first aids prevented 18 fires at a loss of only \$9,305, the amount at risk being \$168,118. Hand extinguishers saved the loss on 27 fires, on which \$291,875 was at risk.

Friction in the machinery retains its unenviable place at the head of the list of causes of fires, 23 fires having originated from this cause, against 16 in 1930, indicating that much remains to be done by installing anti-friction bearings.

Electrical hazards come next with 23 fires, but their resultant loss was only \$1,603, against \$17,391 for the friction fires. More attention must be given to wiring and renewal of fuses blown out. Plugging of fuses is a bad practice, and it is indefensible to continue a plugged fuse in service after an opportunity to insert a fuse with correct amperage.

Lightning started 10 fires with a loss of \$6,597, comparing favorably with the 31 lightning fires in 1924.

Incendiary fires have averaged less than two per year, but in 1931 numbered 4 with the large loss of \$17,065.

Emphasis should be placed on the practice of going over the plant before locking up for the night. About the same number of fires occurred in the daytime as at night but the night fires were undiscovered in many instances until they had gotten beyond control, so that the losses amounted to \$205,000 for the night fires against only \$46,000 for the daytime fires. Of the daytime fires only 14 per cent produced total losses, while of the night fires 46 per cent were total losses.

Loss Record for Mills and Elevators—1931

Cause	Number	Loss
Automobile and motor trucks.....	None	.....
Cob burners and cob houses.....	None	.....
Electric hazard.....	23	\$ 1,603.90
Explosions in Building.....	10	6,485.03
Exposure.....	13	23,635.65
Flues and stoves.....	14	2,344.99
Friction.....	23	17,391.75
Grain drier.....	1	14.69
Incendiary.....	4	17,065.18
Lighting, other than electric.....	None	.....
Lightning.....	10	6,597.96
Locomotive sparks.....	2	1,922.00
Sparks, other than locomotive.....	1	9.35
Matches, other than smoking.....	1	3.00
Internal combustion engines.....	3	1,187.18
Power house and power, other than electric.....	None	.....
Railroad accident.....	None	.....
Spontaneous ignition.....	4	521.25
Tramps.....	None	.....
Unknown.....	57	171,959.35
Miscellaneous known causes.....	2	187.81
Total.....	168	\$250,949.09
Salvage and reinsurance.....		20,187.87
Net losses paid.....		\$230,761.22

Losses and Causes of Elevator Fires for 29 Years

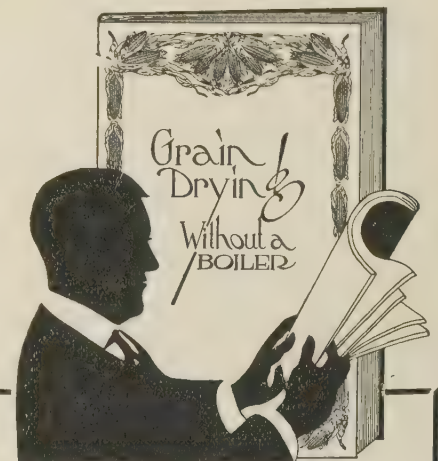
Cause	Number	Loss
Automobile and motor trucks.....	4	\$ 5,812.14
Cob burners and cob houses.....	23	91,529.88
Electrical hazard.....	140	115,727.68
Explosions in building.....	26	40,735.55
Exposure.....	191	244,642.84
Flues and stoves.....	97	178,527.74
Friction.....	298	686,415.62
Grain drier.....	16	21,962.79
Incendiary.....	55	193,405.76
Lighting, other than electric.....	14	31,994.74
Lightning.....	446	466,419.00
Locomotive sparks.....	173	434,362.50
Sparks, other than locomotive.....	16	52,870.81
Matches, other than smoking.....	37	56,823.31
Internal combustion engines.....		
Power house and power, other than electric.....	176	371,337.26
Railroad accident.....	2	4,508.96
Spontaneous ignition.....	108	131,709.25
Tramps.....	19	58,299.95
Unknown.....	549	2,337,958.43
Miscellaneous know causes.....	61	55,193.74
Total.....	2,451	\$5,580,237.95

### Insurance Notes

**Chicago, Ill.**—Eugene Arms, manager of the Mutual Fire Protection Buro, has been nominated as one of the five directors of the National Fire Protection Ass'n, having its headquarters at Boston.

**Harrodsburg, Ky.**—The plant of the Cogar Grain & Coal Co. was endangered by burning gas and oil flowing down a drainage canal from seven storage tanks that exploded nearby. The only immediately available material to dump in the canal to check the flow was sacked feed, 25 bags of which were used successfully to save the grain elevator. A timely new use for feed of any grade, and it is not necessary to await the O.K. of a Dept. of Agri. inspector before using it.

The Farm Board has not been selling the 5,000,000 bus. of cash and future wheat per month as planned.



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# Field Seeds

**Salinas, Cal.**—C. H. Eckhart and his son, C. H., Jr., have organized the Eckhart Seed Co., now operating here.

**Ivy, Va.**—George H. Carey, Jr., district manager of the Virginia Seed Service, died at Gainesville, Fla., Feb. 26.

**A Denver** seed dealer makes a substantial profit, particularly in the winter time, from sales of food for wild birds.

**Omaha, Neb.**—Geo. A. Duncan has established the Geo. A. Duncan Seed Co. A second store has been opened by the Earl E. May Seed & Nursery Co. in South Omaha.

**Dodge City, Kan.**—A. & S. Seed Co., recently opened here. A sideline of feed grinding will be carried in connection with the seed cleaning and selling business.

**Milwaukee, Wis.**—Vaughan's Seed Store, Chicago, is opening a branch here under the management of John Vaughan, son of Leonard H. Vaughan.

**Birmingham, Ala.**—An involuntary petition in bankruptcy asking appointment of a receiver for the Gorman-Gannill Seed Co. here, has been filed in the District Court.

**Wisconsin** used 45,610 tons of fertilizer last year, a drop of 11% from the previous figure. Overburdened with politicians and high taxes, Wisconsin struggles on.

**A cold snap** in southern areas, one of the most severe in several years, is causing replanting of crops in many districts. The prevailing good weather preceding the cold wave caused many to plant prematurely.

**Retailers** of seeds are less disposed to grant credit to the farmers than in previous years, still the seed trade looks for good business. Expectations of good volume rest largely with garden seeds.

**New Orleans, La.**—Vance R. Schultz, formerly with Reuter Seed Co., has charge of the Southern Seed & Feed Co. Plans include expansion into the wholesale field on grass and field seeds.

**New York, N. Y.**—Stumpp & Walter Co., seeds, have moved into a new 7-story building, which was built following forced vacating of the old premises to make way for a post office site.

**Shenandoah, Ia.**—Timothy seed which contained buckhorn seed caused a fine of

\$25 to be assessed against the May Seed & Nursery Co. following filing of charges by the state seed inspector. The seed had been sent to Northern Iowa.

**Wichita, Kan.**—Ross McCausland-Seeds is the name chosen by Ross McCausland, Bert McCausland, and Charles Dye, in opening a new seed establishment here. The associates have long been identified with the Kansas seed trade.

**Kansas City, Mo.**—The many friends of Howard S. Patrick of the Rudy Patrick Seed Co., who, following a major operation, has been confined in Chicago for the last three months, will be glad to learn he is improving rapidly and will soon return to his home.

**Minneapolis, Minn.**—Mail election of officers for the Ass'n of Commercial Seed Analysts of North America placed K. E. Smith, Baltimore, Md., pres.; Helen Peebles, Cincinnati, O., vice-pres.; Lillian C. Vader, Minneapolis, sec'y-treas.; Walter Pfaender, Chicago, Chairman Membership Com'te.

**Evidence** of frauds in Emergency Seed Loans made in the southeast last year has initiated inquiry which is causing some 20 prosecutions in Alabama, Tennessee, Georgia, North Carolina, Arkansas, Louisiana, Florida and Mississippi. It is expected the inquiry will be extended to all areas in which loans were made.

**A limestone score card** has been set up by the experimenters at the Illinois Agricultural Experiment Station. Material that will pass thru a 28-mesh Tyler sieve will become effective in approximately a year and is rated at 100. Finer or coarser particles are rated up or down accordingly. Purity of the material, considered equally important, is considered separately.

**North Dakota** has changed its alfalfa seed grades and its blue, red and yellow tag certifications to purple, blue and white tag grades, in accordance with the new rules adopted at a joint meeting of certifying officials and farmers in Montana, Idaho, Utah and South Dakota. This lowering of the grades was to meet the demands of the farmers in the alfalfa growing states mentioned.

**Cincinnati, O.**—J. M. McCullough's Sons Co. have moved into the new store that replaces the one that burned last October. The new store is a fully modern structure with up-to-date display cases, individual sales tables, and improved fixtures that build sales for the company. The company no longer conducts a wholesale garden seed business, but has greatly expanded operations in the wholesale grass seed field.

**An Illinois law** passed last summer provides that lawn grass seed must be labelled, showing that the seed is a mixture, stating the approximate percentage by weight of each kind of seed constituting 5% or more of the mixture, the weed seeds present, which must be within the limitations of the law, the approximate percentage of inert matter by weight, and the name and address of the vendor.

## County Agents to Distribute Seed Lists

County agents in Wisconsin are receiving a schedule showing where seeds certified by the Wisconsin Experiment Ass'n may be obtained, and thru them these schedules are being made available to residents in each county.

The list includes standard varieties of corn, grain, peas, soybeans, clover and grass seeds, etc., made up from the compiled inventory of surplus seeds as reported to the Experiment Ass'n by growers. Both registered and certified seed is being offered.

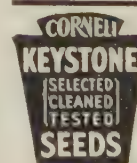
More merchandising by government employees. Are Wisconsin farmers becoming children in the hands of a paternalistic government which they are compelled to support thru monstrous taxes?

## North Dakota Seed Com'te Broadens Tolerance on Durum Seed

The Emergency Seed Advisory Com'te, originally allowing a tolerance of not more than 2% hard spring wheat in durum seed approved for distribution in regions suffering a shortage, has changed this tolerance to 4%, according to Sec'y E. W. Norcross. Samples formerly rejected may be re-submitted for approval under the new standard.

When seed grain is being distributed from bulk lots by the local grain and feed dealers, it is unnecessary for the dealer to label each individual lot sold. Posting a label in a prominent place on the premises from which the seed is being distributed, as in the office, on the loading platform, on the bin or any other conspicuous position, will answer the law. Such label must give the commonly accepted name of the seed, the approximate percentage of purity, the approximate total percentage by weight of total weed seeds, the name and approximate number of each kind of noxious weed seed present in each pound, the approximate percentage of germination with the month and year of the germination test, and the full name and address of the vendor. Alfalfa and clover seeds require information showing the state where grown; seed corn requires the county as well as the state.

The Emergency Seed Com'te requires seed to be tested by the state seed laboratory before granting its approval, tho seed properly tested by anyone capable of making such a test, may be offered for sale in the state.



**CORNELI SEED CO.**

**FIELD SEEDS**

**BUYERS & SELLERS**

**ST. LOUIS, MO.**

**CRABBS REYNOLDS TAYLOR CO.**

**CRAWFORDSVILLE, IND.**

**GRAIN**

**Clover and Timothy Seeds**

**GET IN TOUCH WITH US**

**LOUISVILLE SEED CO.**

**BUYERS AND SELLERS**

**All varieties CLOVER, FIELD AND GRASS SEED, SOY BEANS and COW PEAS**

**226 No. 15th St. LOUISVILLE, KY.**

**Long Dist. Phone 6727-6728**

## Directory

### Grass and Field Seed Dealers

#### CONCORDIA, KANS.

The Bowman Seed Co., wholesale field seeds.

#### CRAWFORDSVILLE, IND.

Crabbs, Reynolds, Taylor Co., clover, timothy.

#### KANSAS CITY, MO.

Rudy-Patrick Seed Co., field seed merchants.

#### LOUISVILLE, KY.

Louisville Seed Co., seed merchants.

#### MILWAUKEE, WIS.

Courteen Seed Co., field seeds.

#### PHOENIX, ARIZ.

Capital Fuel & Feed Co., hay, alf., Berm., sor. seeds.

#### ST. LOUIS, MO.

Corneli Seed Co., field seed merchants.

Mangelsdorf & Bros., Ed. F., wholesale field seeds.

#### SEDGWICK, KAN.

Sedgwick Alfalfa Mills, field seed merchants.

#### WICHITA, KAN.

Ross Seed Co., Kansas Grown Alfalfa.

## ED. F. MANGELSDORF & BRO.

*Buyers and sellers of  
Sweet Clover, Alfalfa, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas  
St. Louis, Missouri*



### Seeds Not Affected by Proposed Sales Tax

Field and garden seeds, fertilizers, farm and garden products, are expected to be exempt from the proposed sales tax incorporated in the revenue bill now before the House of Representatives.

Seeds are looked upon as necessities, classed with food and shelter. Active measures to win the exemption was taken by legislative committees of the seed associations and considerable credit for their success is extended to John T. Buckbee, Rockford, Ill., seedsman and member of Congress from his district.

### Light Oats Will Make Good Seed If Cleaned

In many sections of the Corn Belt and Northwestern States much of the oat crop ripened prematurely because of drought. These oats are of lighter weight per bu. than usual but if thoroly fanned and graded they should produce a satisfactory crop.

In the eastern Corn Belt section the color and weight of much of the certified seed to be distributed for sowing this spring is not as good as that of last year, but this seed will be entirely satisfactory and will produce a crop of good quality, weather conditions being favorable. As in the case of other seed oats, the light, chaffy kernels of standard and improved varieties should be removed by fanning. The Department of Agriculture advises treatment of seed oats to prevent smut.

### Conditions Governing Crop Loans

Loans have been begun by the various regional offices of the 1932 Crop Production Loans, from the \$50,000,000 fund allocated to the Department of Agriculture from the appropriation for the Reconstruction Finance Act. A list of the offices was published on page 249 of the Mar. 9 Grain & Feed Journals.

Conditions surrounding the loans are publicized to indicate that no loans will be made to a man with other means of livelihood than farming or who did not operate a farm last year, nor will loans be granted for acreages exceeding the average planted in 1930 and 1931.

Loans will cover preparation of the soil and planting, but no feed for anything more than work animals; borrowings are limited to \$3 per acre for seed, except potatoes, where the limit is \$12, and of this maximum not more than \$1 may be used for miscellaneous expenses other than actual seed.

Promissory notes signed by borrowers bear 5½% interest and are payable on or before Nov. 30. Waivers must be secured from all prior mortgage holders, giving the government a first mortgage on all crops.

### Imports and Exports of Seeds

Imports and exports of seeds for January, compared with January, 1931, and for the 7 months ending January, are reported by the Bureau of Foreign and Domestic Commerce, in lbs., as follows:

#### IMPORTS

	January		6 mos. ended Dec.	
	1932	1931	1931	1930
Alfalfa .....	60,000	7,500	81,095	69,050
Red clover .....		748,049		301,992
Crim. clover .....			1,794,977	3,224,672
Other clover ..	148,363	93,255	280,257	364,834
Vetch .....	119,035	506,711	2,021,568	1,205,886
Grass .....	649,154	578,074	2,710,813	3,265,938

#### EXPORTS

	1932	1931	1931	1930
Alfalfa .....	7,319	42,943	119,601	257,543
Red clover .....	3,015	52,276	234,153	202,386
Other clover .....	28,590	48,445	111,238	273,344
Timothy .....	830,278	1,437,699	5,492,057	8,610,531
Oth. grass seeds	452,606	764,445	3,552,079	2,888,895
Oth. field seeds.	13,041	335,917	174,643	523,337

### Merchandising Fertilizer and Servicing the User

By IRVIN J. MATHEWS

Three factors determine the proper fertilizer analyses for a farmer to use, soil type, the crop, and previous management of the soil.

It seems peculiarly fitting that elevator managers prepare themselves not only to merchandise fertilizer to their patrons, but to service them as well. In the long run, the servicing is most important because it pays going and coming.

In parts of the east and south, are people who make fertilizer merchandising their sole business. Through the Grain Belt, this work is performed by the elevator trade.

Civilization runs on a tricycle of which nitrogen, phosphorus, and potassium are the wheels. There are a few scattered areas where sulphur, magnesium, manganese, etc., must be added to grow crops but NPK is the essential mineral diet of all plants. Animals, including man, eat nothing that was not first gathered from the air and soil by plants.

The elevator manager should know that nitrogen in its various forms, nitrates, sulphate of ammonia, dried blood, tankage, cyanamide, these grow the leafy part of the plant.

Phosphorus, in its many forms, superphosphate, treble superphosphate, etc., is responsible for the stature of the plant, the hardening and the ripening of the kernels. Phosphates are especially desirable where there is a short growing season. It hurries the plants to maturity, ripens the grain.

Potash, in its various forms, helps the plant to withstand disease, stiffens the straw, plumps the kernels, strengthens the roots and is necessary to making of plant starches and sugars.

The soil and its initial content of NPK has much to do with the additional plant food required. Commonly the upland soils such as the rolling clays and loams, run out of phosphorus first. Ordinarily the first procedure is to supply superphosphate in some form but as this is applied and crop yields increased, larger demands are made for soil nitrogen and potash.

Soils that were formed by water, such as muck or peat and sand are generally shy on potash from the first. After some years of cropping, some phosphate or nitrogen or both is profitably mixed with the potash. On the sandy soils of Langlade County, Wisconsin, a 3-9-18 was the best potato fertilizer. In north-central Iowa, extensive tests showed that Cobbler potatoes on peat soils gave their most profitable returns for 500 pounds of 0-9-27 fertilizer. In southern Indiana, sweet potato growers found, quite by chance, that they could more profitably use a 2-8-16 fertilizer than a 2-16-8 as they had been using.

The fertilizer frontier moves west with civilization. Potato growers of Maine use from 2500 to 3000 lbs. of fertilizer per acre. The potato growers of New Jersey use around 2,000 lbs. of fertilizer per acre. The wheat growers of Ohio use from 250 to 300 lbs. of 2-12-6 on wheat. Farmers of Minnesota grow a lot of wheat using only 100 lbs. per acre of superphosphate.

It is easier to maintain fertility than to build it. Elevator operators are wise to recognize and use this fact as an opportunity both to increase their business and render greater service to the farmers of their trade area. One fact stands sharp and clear: Big acre yields are cheap bus.; low acre yields are high-priced bus. Farm profits come from cheaply produced bus., and elevator volume comes from heavy yields.

### Kentucky Enacts Seed Law

A seed law patterned after the Indiana law has been enacted by the Kentucky legislature and was made effective Mar. 14.

The Agricultural College, University of Kentucky, has charge of regulation. Enforcement funds will be created from the sale of the tags by the state.

The act requires proper marking, and germination and purity declarations, to prevent dumping of poor seeds in the state.

### Wheatland Milo and "P by K" Wheat to Be Distributed in Kansas

Wheatland milo, short, sturdy, hybrid sorghum, developed at the Woodward, Okla., experiment station for planting and harvesting with modern wheat machinery, tested on 70 Kansas locations, is available this year in sufficient quantity to plant 500,000 acres, according to the Kansas Crop Improvement Ass'n. In tests last year it yielded from 8 to 52 bus. per acre, averaging 27.2 in northern counties, 22.8 in southern districts. When the crop averaged 24.6 bus., it required 22.7 minutes to harvest one acre with a combine.

"P by K" wheat, still bearing its laboratory name (PxK 2628), created by mating Prelude, early spring wheat, with Kanred, hardy Kansas winter wheat, in California, is expected to be field planted to increase available seed. In growing tests it has headed four to six days ahead of standard varieties, suffered little from lodging, and appeared little affected by leaf rust. Its purpose is to spread out the farmers' harvest by having a part of his crop mature ahead of the rest.

Further development work is also being conducted at the Manhattan and Hays, Kan., experiment stations on Tenmarq, new cross between Crimean and Marquis wheats, described on page 539, Nov. 11, 1931, Grain & Feed Journals.

## Courteen Seed Co.

Established 1892

## Milwaukee

**COURT**

TRADE MARK

**BRAND**

**FINEST QUALITY**

**Specialize in**

# ALL CLOVERS TIMOTHY and ALFALFA

*Your Offers and  
Inquiries Solicited*



## Books Received

**CANADIAN TRADE INDEX, 1932**, is invaluable to those trading in Canada, containing an alphabetical list of over 10,000 manufacturers, their branches, trade marks and brands, a directory of the manufacturers of Canada classified alphabetically by the articles made, a directory of exporters of agricultural produce including grain and seeds. Many other valuable sections of the volume cover methods of developing export trade, facilities offered by the Commercial Intelligence Service, and an analysis of Canada's trade. Published by the Canadian Manufacturers Ass'n, Toronto, Ont. Cloth, 868 pages, \$6.

**FUTURE TRADING AND THE CASH GRAIN MARKETS** compares those markets from the standpoint of the hedger, covering seasonal movement of cash prices relative to future prices, factors causing unexpected variations in the relation of cash to futures prices, spreading operations of hedgers, basis gains or losses, changes in futures prices preceding changes in cash prices, indirect benefits of hedging. By G. Wright Hoffman, consulting grain economist of the Grain Futures Administration. Circular No. 201, 56 pages. Copies may be obtained on request from the Office of Information, U. S. Dept. of Agriculture, Washington, D. C.

**STRATEGY IN HANDLING PEOPLE** tells how the world's ablest men have swayed others to their own purposes. Dramatic incidents from the lives of over 200 successful men explain exactly how these men have gained personal power, how they have found the true secret of success. How to make others like you; how to establish influence over superiors and subordinates and friends; how to put across ideas; how to size up individuals; how to handle difficult business situations, are a few of the vital problems made clear in this epoch-making book, a

veritable treasure trove of interesting anecdotes about famous men. By Ewing T. Webb, business man; and John J. B. Morgan, psychologist, Northwestern University; published by Boulton, Pierce & Co., Chicago, Ill. Cloth, 260 pages; \$3.

### Grain Waste Converted Into Coal

Some few years ago a party named Dale, conducting an extensive grain business, had a pile of chaff, corn husks and other offal perhaps 50 feet thru, 30 to 40 feet high, in a vacant lot. It simply grew with the accumulations of the years. Then city ordinances changed. The city ordered the stack removed.

Immediately beneath the surface, the exterior was found of much the consistency of well-rotted manure. As one continued into the interior it grew increasingly hot. This heat of the interior it was discovered, changed the matter to a black carbon. All the volatile content had been driven off.

Careful examination showed that much of this material was pure coal. The discovery upset the prevailing theory that it required entire ages to form coal. This Cincinnati coal was produced inside of a few years' time. Also, it was formed without the colossal pressure one had always assumed essential for coal. There was pressure in the stack, of course. Primarily, tho, it was the heat generated in the mass that started the formation of coal here. This heat in the mass liberated the gases in the stack. The rain, the snow, brought moisture to seep in and help decomposition the more. By and by all volatiles were in position to be freed. The carbon remained, a coal.—Felix J. Koch in *Retail Coalman*.

Frank Hutchinson, Lawrenceburg, Ind., has been elected chairman of the board of the Millers National Federation for the year beginning in May.

### Farmers Ask Repeal of Marketing Act

G. W. Robertson, who is manager of the Atwood Grain & Supply Co., at Atwood, Ill., and also local sec'y of the Farmers National Protective Ass'n, is receiving many signatures by farmers on a petition to abolish the harmful Farm Board. The petition is headed:

#### Petition

The following dirt farmers and farm land owners of Illinois do hereby earnestly urge every Congressman from Illinois, Iowa, and all other states, to use every effort possible to secure a repeal of the Agricultural Marketing Act, believing, as we do, that its operation is injurious to the farmer and to the entire nation.

Name..... Address.....

**Open interest** in wheat futures on the Chicago Board of Trade has showed an increase each day since Mar. 1, irrespective of daily rise or fall in price. Since January the increase has been from 112,000,000 to 130,000,000 bus. Since the smaller speculators have not been doing the additional buying it is surmised to be the accumulation of a long line by strong interests willing to take on the Farm Board as an antagonist. It is even possible that the Farm Board is letting go of cash wheat and replacing with the futures, as is the fact at Kansas City.

Instead of promoting the slogan "Buy Now" make it "Sell Now." There is much more likelihood of increasing sales by pointing out how great present day values are than by appealing to patriotism. We cannot mix economics and patriotism except for a few hours, but if we sell an article by the appeal to reason that a dollar goes a third farther now than before, we are providing the genesis of a buying movement which is sound and maintains itself.—Merle H. Thorpe.



HESS DIRECT HEAT DRIER AND COOLER—1000 Bushels Hourly  
CONTINENTAL ELEVATOR, operated by Continental Elevator Co., Kansas City, Mo.

*Hess Driers Are Patented.  
We Do Not Infringe Patents of Others.  
We Guarantee This.*

## KANSAS CITY 1930

HESS DIRECT HEAT DRIER

Eagle Elevator

Operated by Vanderslice-Lynds Co.

## KANSAS CITY 1931

HESS DIRECT HEAT DRIER

Continental Elevator

Operated by Continental Elevator Co.

## KANSAS CITY 1931

HESS DIRECT HEAT DRIER

Rock Island Terminal Elevators operated  
by Simonds Shields Lonsdale Grain Co.

*The Satisfaction and Service Given by Hess Driers  
Has Always Been the Source of Our Business*

WRITE US

HESS WARMING & VENTILATING Co.

1211 SOUTH WESTERN AVENUE  
CHICAGO, ILLINOIS

HESS DRIER Co. OF CANADA, LTD.

68 Higgins Avenue, Winnipeg, Manitoba



# Feedstuffs

**French Lick, Ind.**—The annual convention of the American Feed Manufacturers Ass'n has been tentatively set for June 2-4, at the French Lick Springs Hotel.

**Los Angeles, Cal.**—The 8th annual convention of the California Hay, Grain & Feed Dealers Ass'n will be held here Apr. 22-23. R. V. Anderson, Los Angeles, has been appointed general chairman in charge of program and entertainment.

**Fort Wayne, Ind.**—The National Hay Ass'n will hold its 39th annual convention here July 5 and 6. Preliminary organization of convention com'tes has been done. C. G. Egly, late pres., being made convention sec'y and treas. The convention is being held a little earlier than usual.

**Washington, D. C., Mar. 12.**—Exports of cottonseed cake and meal totaled 170,069 tons for the 6 months ending Jan. 31, compared with only 26,818 tons during the same period a year ago, according to the Department of Commerce. American cottonseed cake and meal has enjoyed an upturn in the demand from foreign feeders.

**Washington, D. C., Mar. 12.**—Reports indicate 4,077,408 tons of cottonseed crushed between Aug. 1 and Feb. 29, in this country, compared with 4,127,823 tons during the same period a year ago. Production of cottonseed cake and meal during that period was 1,829,359 tons, compared with 1,878,120 tons a year ago.—Department of Commerce.

**Dover, Del.**—The sale of milk product feeds of all kinds is increasing in Delaware, following the rapid growth of the poultry industry. In accordance with the tentative definition of the Ass'n of American Feed Control Officials, requiring at least 5% fat in dried buttermilk, no dried buttermilk with a lower guarantee will be registered.—H. H. Hanson, state chemist.

**Ogden, Utah.**—The Reconstruction Finance Corp. has allotted \$500,000 to Utah for livestock feed loans. Sec'y Hyde of the Department of Agriculture has appointed Edw. E. Jenkins, Salt Lake City financier, as administrator of the fund. The emergency fund followed reports that thousands of cattle and sheep were dying on desert ranges because snow covered the feeding grounds and the owners could not afford to buy necessary feed.

**Chicago, Ill.**—Many favorable comments are being made in the trade on "Solving the Feeding Problem," the new booklet on yeast feeding just published by the Northwestern Yeast Co. It gives detailed information regarding breeding stock, culling, feeding and caring for chicks and laying flocks, fattening for market, raising turkeys, ducks and geese, and the prevention of disease. Well illustrated. Available free from the Northwestern Yeast Co.

**Jackson, Miss.**—"Sales of commercial feedstuffs in January and February, 1930, as indicated by receipts for tax inspection stamps, totaled 34,335 tons," says J. C. Holton, Commissioner of Agriculture. "In the corresponding months of 1931 the total was 28,887 tons; in the first two months of this year the figure dropped to 11,314 tons, a reduction of two-thirds. Farmers all over the state are selling grain and hay in car lots. One Mississippi mill is reported to be manufacturing 1,000 bus. of home grown corn into meal daily."—GHW.

## California Feed Council Meeting Works on Feed Law Enforcement

The first informal meeting of the Feed Council jointly proposed by the mixed feed com'te of the California Hay, Grain & Feed Dealers Ass'n, and the California Farm Bureau Federation, was held in San Francisco, Mar. 10.

Represented at the meeting were such prominent figures as Dr. Geo. H. Hart, University Farm; Dr. W. H. Kellogg, Department of Public Health; John Curry, California Cattlemen's Ass'n; Sam Greene, California Dairy Council, and others.

The Council grew out of joint efforts of the ass'ns, whereby each appointed two representatives to meet with each other and "a representative of the State Department of Public Health, a representative of the College of Agriculture and such others as are interested with the objective of forming an informal council for the purpose of studying the existing laws relative to the regulation of manufacturers and sale of mixed feeds, and to formulate such changes in existing laws and enforcement methods as will provide a betterment for the industries."

The Hay, Grain & Feed Dealers Ass'n is represented on the Council by F. E. La Shelle, Jr., and Art Ascherman.

**Encouraging** farmer patrons to cull their dairy herds, saving out the high producers, is one way of improving feed sales. High producers pay a big enough profit to permit buying feed, even at present prices. High producers give low cost milk.

## Fertilizer as a Feed Side Line

By FRANK MECHENER, Seattle, Wash.

Like many other merchants, the feed dealer, has certain seasons when sales begin to drop as in the spring when the pastures green into grazing land. Then he is anxious to find something that will keep up business volume and make a profit.

The druggist of 30 years ago confined his business mostly to the sale of drugs. Today he handles all kinds of sundry articles, even lunches are a side line. He could not be in business without them. It is reasonable to assume that the feed dealer should take on lines of merchandise that fit in well with feeds and grinding.

In the spring when the feed business is dropping off and the farmer, the gardener, the home owner is turning thoughts to fertilizer, who is in a better position than the feed dealer to supply their wants? His warehouse is available for storage, his trucks for delivery, he has close personal contact with the people who use the most fertilizer. A great many feed dealers, realizing this have built a good fertilizer business. Six years ago one dealer sold from 10 to 15 tons of fertilizer. This has increased rapidly. Three years ago his sales were 300 tons. The next year increased the tonnage to 600; last year it was nearly 1,000. Another dealer last year had increased his sales to 17 car loads. A great many are handling from 100 to 300 tons annually.

Fertilizers show a good profit and often greatly increase business in other lines. For this reason 75% of the feed dealers in the Northwest handle them.

## Federal Sales Tax to Exempt Feeds and Other Necessities

Strong opposition to the federal sales tax of 2½% on manufactured and other goods now before Congress, has developed from many quarters and demands for exemptions have grown until many members of the House favor its abandonment.

Included in the exemption list is "Bran and shorts and feeds for animals and fowls." Other exemptions include staple human foods and educational matter.

## New Feed Trade Marks

**Puritan Mills, Inc., Atlanta, Ga., No. 319,** 046, for horse and mule feeds, poultry feeds, dairy feeds, and livestock feeds, being an upright, rectangular border bearing a flowered design. No. 321,970 for mixed poultry feeds, is this border, inclosing a reproduction of a hen and a rooster against a circular background, above which is imprinted "WOCO."

**San Francisco, Cal.**—The battle of the California Hay, Grain & Feed Dealers Ass'n, cooperating with interested parties, against the attempt of the State Board of Pharmacy to prohibit the sale of cod liver oil by general merchandisers, continues. Injunction proceedings have been instituted against the State Board.

## U. S. Straw Standards Effective July 1, 1932

Demand for uniform straw standards by interested agencies has caused the Bureau of Agricultural Economics to study factors affecting the quality of straw. Standards have been issued, which are expected to provide a definite quality basis for marketing straw.

**Definitions.**—For the purposes of the United States Standards for wheat, oat, barley, rye, and rice straw:

**Straw** shall be the remnants of wheat, oat, barley, rye and rice crops from which the seed has been threshed, and may include not to exceed 10% (of the total straw) of grasses that are not coarse and woody.

**Chaff** shall be shattered glumes, also all pieces of straw not over four inches in length.

**Foreign material** shall be all matter other than straw except grasses that are not coarse and woody.

**Color.** The color specifications "bright" and "weathered or stained," shall be interpreted according to the color determinations ascertained by the method prescribed by the U. S. Dept. of Agriculture.

**Percentages of chaff and foreign material** shall be based upon percentages by weight of the total straw.

**Grades.** U. S. Grade No. 1 shall be bright in color with not more than 35% chaff. No. 2 may be weathered or stained and carry no more than 35% chaff. Sample Grade may be straw which contains more than 10% of foreign material; or more than 75% chaff; or which is heating, hot, wet, musty, moldy, caked, badly stained, or badly weathered; or which is otherwise of distinctly low quality.

1. The grade designation for straw shall include successively in the order named: (1) the letters "U. S.," (2) the number of the grade or the words "Sample grade," as the case may be, and any special grade that may apply, and (3) the words Wheat Straw, Oat Straw, Barley Straw, Rye Straw, or Rice Straw, as the case may be.

2. The special grades for "chaffy straw" apply to straw of any numerical grade or to Sample grade containing more than 35% chaff.

### SPECIAL GRADES

**Grades for straight rye straw:** Rye Straw of any grade, which is straight and untangled from threshing and which has been pressed into large box-press bales, shall have the word "Straight" included in and made a part of the grade designation, as: "U. S. No. 1 Straight Rye Straw," "U. S. Sample Grade Straight Rye Straw (Moldy)."

**Grades for chaffy straw:** Wheat straw, oat straw, barley straw, rye straw, or rice straw of any grade, which contains more than 35% chaff, shall have the word "Chaffy" included in and made a part of the grade designation, as: "U. S. No. 1 Chaffy Oat Straw," "U. S. Sample grade Chaffy Barley Straw (Wet)," or "U. S. Sample grade Chaffy Wheat Straw (Over 75 per cent chaff)."



## The Kind of Service and Equipment that Builds Business

By R. D. MACDANIEL, *Grain Dealers National Mutual Fire Insurance Co.*

Nowadays successful business of any kind must give its customers real service. Real service constitutes satisfying a customer's wants, tho the customer may not even know his wants.

Most farmers raise stock but relatively few do so successfully. Why? Because they lack knowledge. Perhaps they do not have the right facilities; perhaps they do not know what or how to feed to best advantage. Satisfy the wants of such a customer so he will make more money from his hogs, cattle or poultry, that is service, the kind of service that holds customers and builds trade, the kind of service that will eliminate portable competition.

First and foremost, therefore, in the fight for business we place knowledge. If you would make money thru preparing feed-stuffs see that your feeds in turn make money for the farmers. Without some knowledge of correct feeding of live stock that is impossible. It may take some study but the man who will not study his business cannot hope to carry on that business successfully.

The average operator of a portable has no background of experience as has the established dealer, he is only a grinder of grain and at a disadvantage to start. If the established dealer will augment his present knowledge with current information from trade publications and bulletins he will have a foundation upon which a successful feed business can be built.

Secondly, the established dealer must have auxiliary equipment with which to make better feed than can be made by a portable. This need has been clearly demonstrated by the increased number of mixers installed in recent months. Many dealers have found a talking point in installation of magnetic separators which enable them to produce feed free from injurious metallic particles.

Some dealers have established truck routes for delivery of feeds or deliver direct to destination. Where this is done, it is possible to add to the service by offering to bring along something which may be needed from the grocery. This may seem like stretching a point, but with co-operation from the grocer it involves practically no extra work and adds materially to the good will which the dealer is building.

## Free Public Wheat to Hungry Livestock

Distribution has begun on portions of Farm Board wheat made available thru the Red Cross to farmers in drought stricken regions for feeding starving livestock, from the 40,000,000 bus. of Farm Board wheat appropriated by Congress to help the needy. Shipment of something over 14,000 bus. is reported to have been made from Omaha into South Dakota, where it is to be cracked or crushed before being given to the needy.

The Red Cross has been provided with a list of states where live stock needs are greatest, including North and South Dakota, Montana, Iowa, Minnesota, Nebraska, Wyoming, Idaho, Utah, and New Mexico. It is privileged to exchange wheat for transportation, milling and other costs, having assumed administration of distribution only on condition that it would not be put to expense in so doing. Consequently, it is to be expected that a large part of the wheat appropriated will be absorbed in distribution expense. What amount of the wheat will be used for feed and what amount for flour remains uncertain.

## Roughage Costs Money

By PROF. J. F. LANTZ, OLEAN, N. Y., *before Eastern Federation of Feed Merchants*

Roughage is a feed which costs money, therefore it should be correctly valued, fed on a basis of nutritive content. Guess work nearly always means loss. Loss is incurred generally by waste in over feeding roughage, almost universally practiced in eastern dairy sections. Loss is increased also by unbalancing the ration from the over feeding of roughage.

Roughage in the eastern dairy section is largely carbohydrate. By excessive feeding the ration is unbalanced by the excessive amounts of carbohydrate.

It is pretty generally agreed among nutrition authorities that excessive carbohydrate or dry matter depresses digestion and the circulation of the blood thru the mammary system of the cow causing lower milk production.

Another factor often over-looked by feeders is the comparative cost of protein in roughage, compared with that in well balanced dairy rations, or protein grain by-products.

For example, a 20% digestible protein dairy ration costing \$30 per ton will furnish digestible protein at around 7½¢ per pound whereas the digestible protein in leguminous hay at \$20 per ton would cost around 12½¢ per pound and the digestible protein in carbonaceous hay at \$20 would cost about 25¢ per pound.

Many farmers in the east purchase more hay than they grow on their farms and in view of the increased cost of the food elements in hay over those in grains, it would be more economical to feed only a sufficient amount of hay to raise the dry matter in the ration to requirements.

Receiving reports of portable grinder competition in two counties, the Feed Dealers Ass'n of Washington took the attitude that it was a temporary annoyance, so unsound economically that its continuance could not be expected.

## Alfalfa Meal Production Reaches New Season Low

Washington, D. C., Mar. 15.—Alfalfa meal production in the United States during February, 1932, totaled 12,361 short tons, according to reports received from meal grinders by the United States Bureau of Agricultural Economics. Grindings for the first nine months of the 1931-32 season were 60% of those in the same period last year and 52% of those two years ago.

Approximately 33,600 tons of meal were in store at mills at the first of February. This, together with the month's grindings, made an aggregate supply for February of approximately 46,000 tons. Stocks at the close of February were about 29,400 tons. Domestic consumption accounts for most of the difference of 16,600 tons, since exports in recent months have been relatively small. Exports during January totaled 53 short tons. Statistics of February exports are not yet available.

Alfalfa meal production, United States, 1931-32, with comparisons shows:

Month	Production in Tons			
	1931-32	1930-31	1929-30	1928-29
July	12,676	22,272	24,408	26,707
August	15,678	28,614	28,884	38,716
September	16,623	40,025	32,252	42,925
October	14,204	24,994	40,847	40,427
November	21,224	27,705	27,785	33,132
December	19,495	25,646	42,077	31,898
January	12,546	33,285	44,821	51,232
February	12,361	15,403	41,653	37,393
March		13,140	22,871	27,893
April		12,141	15,588	14,659
May		10,617	11,197	8,686
June		22,242	30,666	19,385

Total for year..... 291,677 362,049 374,053

## Use of Horses Increases

This is a horse year. Demand is wide spread. Farmers are the principal buyers.

Country newspapers thruout the central west—even out in Kansas—are carrying news items about the increased demand for horses manifested at local sales.

Farm implement dealers report greatly increased demand for repair parts for horse-drawn implements, and some sale of new horse-drawn tools. Hardware dealers report strong sales of single trees, clevises, and repairs for horse-drawn tools.

Collar manufacturers are running overtime to fill orders, and are unable to keep up with the demand for the cheaper grades. Harness dealers report heavy sales of strap work and repair parts, and increased sales of their lower priced new harness. Mail order houses report an unusually large volume of sales of strap work and harness oils. —*Horse Ass'n of America.*

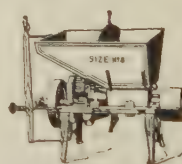
[Grain and feed dealers will feel more encouraged if this causes an improved market for horse and mule feeds, including oats and molasses.—Ed.]

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### Wheat Feed Being Used in Washington

Ground whole wheat hay is being used for feeding sheep and cattle at Wenatchee, Wash. The entire plant, head and straw, are ground to the texture of bran in the old flour mill at Tonasket, the grain being crushed in the process. The product is slightly sweetened to make it palatable for live stock feeding.

Advantages claimed for this product over ordinary feeding of wheat hay is that sheep will get their full share of straw. Otherwise sheep will hunt out the heads and waste much of the straw, suffering digestive disturbance because unsupplemented wheat heads are hard to digest.

The product is sold in competition with ground alfalfa, bran, and similar feeds, and is rapidly gaining popularity, especially with sheep raisers, who contend ordinary ground roughages are dusty and cause asthma among the sheep.

Promoters of the venture are William Batterman, rancher, and M. H. Schweikert, pioneer miller of Havillah and Tonasket. The entire output of the plant is being absorbed in feeding operations at Wenatchee.

### Protein Percentages for Dairy Cows

Authorities agree that the roughage, the animal, quantity of production and quality of production must all be considered in efficient, economical feeding of dairy cows. While a cow will break down an excess of protein and put it to use replacing carbohydrate shortages, feeding rations which make this necessary are more costly than wise. Common grains, supplying carbohydrates, are more satisfactory for this purpose and more economical than high priced protein concentrates. As a general rule, the less protein in a mixture, the lower the cost.

Good alfalfa hay contains about 15% crude protein; clover, 12.8%; timothy, 6.2%; good corn fodder, 5.9%. Obviously a cow receiving alfalfa hay as a roughage does not need a grain ration with as much protein as one receiving timothy or corn fodder.

A 2-year test with 3 groups of 12 cows each at the Cornell University, found grain mixtures carrying 16, 20 and 24% protein, respectively, gave results equally good when the roughage was one-third clover and two-thirds timothy, mixed, plus corn silage. Grain mixtures carrying 20 to 24% protein were unnecessary.

Experiments at the Wisconsin station came to the same conclusion, from which it was recommended that a grain mixture containing 12% protein be fed with alfalfa hay; 15% with clover; 20% with timothy.

Milk heavy in butterfat requires greater shares of grain mixtures than that with lower percentages. Cows giving milk containing 3 to 4% fat should be fed 1 lb. of the grain mixture for each 3½ to 4 lbs. of milk produced. Cows giving milk that tests from 4.5 to 5.5% fat should receive 1 lb. of the grain mixture for each 3 lbs. of milk produced.

### Feed Future Prices

The following table shows the closing bid price each week per ton of standard bran, gray shorts and standard middlings for May delivery:

	Feb. 20	Feb. 27	Mar. 5	Mar. 12	Mar. 19
St. Louis—					
Bran .....	\$10.20	\$10.40	\$10.75	\$ 9.90	\$ 9.85
Shorts .....	11.45	11.30	11.65	11.15	10.80
Midds .....	11.15	11.00	11.20	10.85	10.40
Kansas City—					
Bran .....	8.00	8.50	8.45	7.90	8.05
Shorts .....	9.75	9.75	9.55	9.30	9.30

### Buckwheat Middlings for Feeding

Where readily available buckwheat middlings make good feed for dairy cattle and hogs. They are higher in protein and minerals than most of the cereal grains, tho subject to similar deficiencies of vitamins A and D.

Analysis of buckwheat middlings, good standard grade, shows 88.5% dry matter, 4.5% ash, 27.5% crude protein, 4.2% crude fibre, 45.3% nitrogen free extract, 7% fat. They have a coefficient of digestibility of 80%, and register 70.8% total digestible nutrients.

The most valuable by-product from milling buckwheat into pancake flour, is the dirty-green oily covering of the grain just beneath the hull, which with the germ, becomes middlings. Unfortunately, since the composition of buckwheat flour varies, the middlings commonly found on the market lack uniformity. When the middlings contain a large proportion of hulls it becomes an unsatisfactory feed. Buckwheat hulls are fibrous, with little if any feeding value, and are usually burned by the mills or sold as packing materials for bottled goods.

Trials at the Pennsylvania Agricultural Experiment Station indicated good buckwheat middlings have a feeding value equal to corn gluten feed in producing milk. The West Virginia Station found they required less concentrate and produced more rapid gains on pigs when fed with corn and tankage than wheat middlings. Ohio Station experiments indicated buckwheat middlings to be the equal of linseed meal in feeding pigs, producing highly satisfactory gains when used to supplement corn in conjunction with other high protein feeds like linseed meal, tankage, alfalfa meal and others.

Pennsylvania and New York lead in buckwheat production, growing about 66% of the crop in 1930, compared with 20% in Minnesota, Ohio, West Virginia, Wisconsin and Maine together. Total production in that year was 8,975,000 bus., a drop of 3,000,000 bus. from the preceding year. Buckwheat cakes are still popular in the country, which would indicate that the level of production should remain reasonably constant in spite of sharp reductions in exports of the grain.

Buckwheat is commonly milled in the

heart of producing areas. Since so many of the small mills as well as country elevators have taken to preparing feed for local consumption it is to be expected that more buckwheat middlings will find their way into animal feeds.

### Cottonseed Meal Market Active

By J. N. TRENHOLM

Memphis, Tenn., Mar. 19.—The cottonseed meal market during the week ending today has been quite active, the tendency most of the time being down except for a sharp rally on Thursday. The week has seen a decline of \$1 a ton for the current month and about 50 cts. deferred deliveries. The market started with a decline, remained weak until Thursday, when a sharp rally developed thru overselling and prices were forced up 50 to 60 cts. a ton. Altho the advance lasted thru the early hours of Friday the market became very weak and declined again. July meal which sold at \$13 on Thursday sold at \$12.50 on Saturday.

During the entire week there has been more tonnage of actual meal on the market than at any time for several months. Demand has been extremely light, sales hard to effect.

It is estimated by experts that there will be 1,000,000 tons of cottonseed meal available to be disposed of between now and October. Also estimated is a carry over of 300,000 tons. Statistical position and lack of demand are very bearish, but the market has declined to practically the low price of the season.

The grain market which has maintained itself very well ran into drastic liquidation. Wheat declined 6 cts. a bu. May corn sold today at a new low for the year. Stocks have been unable to maintain their advance. These factors have a depressing effect on those inclined to create a constructive market in cottonseed meal.

Unless there is some general change for the better it is quite probable within the near future necessary liquidation in cottonseed meal may develop. The bullish factors in the market are the possibility of bad planting season and the hope that an export demand will develop for the surplus cottonseed cake and the possibility of an improvement in general conditions.

Alfalfa, highest protein carrier of the legume crops suitable for feeding dairy cattle, finds great favor and many boosters in dairy sections.

Feeding one grain of potassium iodide to each ewe daily during pregnancy will prevent goiter among the lambs, says Prof D. J. Griswold of the North Dakota Agricultural College.

## Thorough Mixing

is what you want in producing sweet feeds. No feeder wants feeds filled with molasses balls. Sweet feeds are not desirable unless the molasses is evenly distributed throughout the mix. Because of its thorough mixing of molasses with feeds

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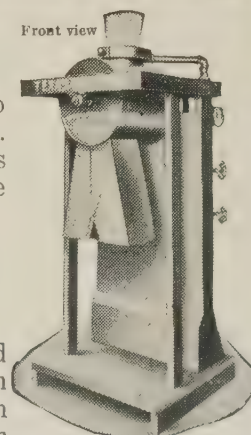
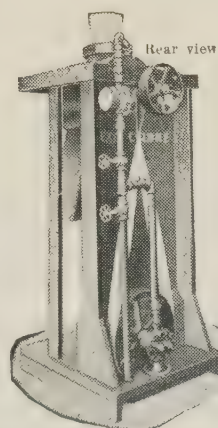
has become the mixer preferred by the better class of custom feed grinders-mixers. It's low in price, easy to install and is an important factor in building up a profit producing feed business. Made in two sizes.

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# Importance of Kind of Protein in Stock Feeding

By PROF. F. B. MORRISON, CORNELL UNIVERSITY, before Eastern Federation of Feed Merchants

For more than 60 years scientists have thoroughly appreciated the importance of supplying farm animals with the proper amount of protein. While much careful work is still needed to determine definitely just how much protein is required for the best results with various classes of stock, yet we do know approximately the quantities that are required for most efficient production. These amounts are recommended in modern feeding standards.

Only within the past few years, however, has it been appreciated that the quality or kind of protein may be just as important as the amount. Proteins are among the most complex substances known to man. A single molecule, the smallest particle of protein, may contain as many as 100,000 atoms. In comparison with this a molecule of water contains but 3 atoms, and a molecule of glucose only 24.

Proteins are made up of 18 to 20 different building stones, called amino acids. From the standpoint of livestock feeding the important point is that some proteins contain all the known amino acids, while others lack certain ones. Some of the amino acids are indispensable in livestock feeding, for animals are unable to make these amino acids in their bodies from other nitrogen compounds. On the other hand, certain of the simplest amino acids can be made by animals from the more complicated ones. For example, the most simple amino acid, called glycine, is not needed by animals in their feed, tho it is practically always present in considerable amounts.

To determine whether any particular amino acid is indispensable for animal life is a complicated procedure and the results of the investigations with certain amino acids are still conflicting. It has been shown definitely, however, that tryptophane, cystine, and histidine are indispensable for maintenance and growth, and that lysine is indispensable for growth, if not for maintenance also. The data on tyrosine and arginine conflicts.

If an animal is fed a ration in which the only source of protein is a highly purified protein which lacks one of these essential amino acids, it will not be able to grow at all, and eventually it will starve thru lack of the essential amino acid. For example, zein, the chief protein of corn, contains no tryptophane and no lysine. If a young pig is fed corn zein as the only source of protein, it will make no growth whatsoever, even tho it receives an abundance of carbohydrates, fat, vitamins, and minerals, and even tho the ration contains an adequate amount of protein.

Much painstaking chemical work has been done to determine the percentage of the various amino acids present in various purified proteins. Such investigations are tedious and expensive, and the data are therefore very fragmentary. Still less information is available concerning the percentages of the various amino acids present in the mixture of proteins found in natural human foods or livestock feeds. This is because it is extremely difficult and well nigh impossible to determine accurately the percentages of certain amino acids in such a mixture of proteins, accompanied by other organic compounds, particularly carbohydrates. Since it is impossible to separate some of the other constituents from the proteins present in a food, it has thus far been impossible to determine with any great exactness the exact total composition of the entire amount of protein furnished by a normal food.

Therefore from the standpoint of nutrition, the most useful information has been gained by carrying on feeding experiments, particularly with laboratory animals, in which the nutritive or biological value of the proteins in various foods and feed has been studied. Such investigations have shown that the protein supplied by various foods differ widely in their efficiency. For example, the proteins in milk, meat, and eggs have an exceedingly high nutritive value, for they supply all of the essential amino acids in abundant amounts. On the other hand, the proteins of all of the cereal grains are considerably lower in efficiency than the proteins of these animal products, and in the quality of protein they furnish, the cereal grains all resemble each other.

From the standpoint of livestock feeding, this fact that the proteins of the cereal grains are of rather low efficiency, when forming the only source of protein, is exceedingly important. The legume seeds differ greatly in the value of the proteins they furnish. Soybeans and peanuts furnish pro-

teins of high quality, while navy beans, lima beans, and cow peas are apparently too low in cystine to serve well as the only source of protein in the diet.

From the great usefulness and value of legume hay in livestock feeding, we would naturally assume that alfalfa hay furnished proteins of very high quality. Recent investigations at the Oregon Station, however, indicate that when fed as the only source of proteins, alfalfa hay is deficient in cystine.

In practical livestock feeding this does not seem to be an important matter, for usually alfalfa or other legume hay is fed in combination with the cereal grains. Fortunately, cereal grains are not lacking in cystine. Legume hay and cereal grain, fed in combination, provide protein of excellent quality. The deficiencies of the cereal grains are made good by the richness of legume hay in certain amino acids, and the deficiency of alfalfa hay in cystine is made good by the cereal grain.

Swine and poultry are more apt to suffer from deficiencies in the quality of protein in their rations than are cattle, sheep, or horses, because swine and poultry are fed chiefly upon the cereal grains and other concentrated feeds. Their digestive tracts are not adapted to make much use of roughage, even good legume hay. Therefore in feeding swine and poultry it is particularly important that rations contain a sufficient supply of protein-rich feeds which furnish an abundance of the amino acids that are contained in low amounts in the cereal grains. Consequently in feeding these classes of stock such animal products as tankage or meat scraps, fishmeal, and milk products have a particularly high value, and also such efficient plant sources of protein as soybean oil meal and peanut meal.

For pigs such combinations as grain, supplemented by linseed meal, wheat middlings, gluten feed, or any combination of such feeds are inefficient, even if care is taken to provide a proper supply of vitamins and minerals. Thru careful experimentation various combinations of feed have been discovered which are more efficient than the standard ration of corn and tankage, which for years was taken as the basis of comparison by scientists conducting swine feeding experiments. For example, in investigations at the University of Wisconsin, we developed a combination of corn, tankage, linseed meal, and chopped alfalfa, which proved fully equal to corn and skim milk for pigs from weaning time to market. Other investigators have found that cottonseed meal can be substituted for linseed meal in this combination, and still other more complicated mixtures have been tested which are fully as efficient as the combination just mentioned.

Surprisingly little data have been secured on the efficiency of proteins in various protein-rich feeds for dairy cows. Investigations by Prof. Hart and his associates at the University of Wisconsin showed that when fed corn stover as the only roughage, protein from the entire corn or wheat grain or protein from gluten feed was distinctly inferior to milk protein or the protein of linseed meal or distillers' dried grains. However, with clover hay and corn silage as the roughages, there was little difference in the efficiency of gluten feed, linseed meal, distillers' grains, or cottonseed meal as sources of protein. These results show that where legume hay forms a considerable part of the roughage for dairy cows, satisfactory rations can be provided without furnishing a great variety of protein-rich feeds.

For example, with good legume hay, even such a simple combination as corn and oat grain, supplemented by wheat bran and linseed or cottonseed meal, is satisfactory. Where a greater variety of protein-rich supplements can be provided without much of any increase in cost, as can quite commonly

be done, it would certainly seem advisable to furnish a somewhat greater variety.

In recent investigations at the Virginia Station, there was relatively little difference in the efficiency of the proteins in peanut meal, soybean meal, and cottonseed meal for milk production, the peanut meal had a slightly higher value. In a trial at the South Dakota Station the protein of gluten feed was fully equal to that of linseed meal in supplementing soy hay and corn silage, a result which seems somewhat surprising, when we consider that this ration supplied no legume hay.

Feeding experiments with beef cattle have shown that when fed as the only protein-rich supplement to a ration of corn grain, legume hay, and silage, linseed meal is more efficient than cottonseed meal. On the other hand we found in investigations at the University of Wisconsin that when we fed a combination of half linseed meal and half cottonseed meal, just as rapid gains were produced by fattening steers as when linseed meal was fed as the only supplement. Recently Prof. McCampbell and associates have found at the Kansas Station that a combination of linseed meal, cottonseed meal, and gluten meal is even better than the combination of linseed and cottonseed meals.

This same triple combination has given excellent results with lambs in experiments by Professors Jordan and Peters at the Minnesota Station, but in a trial at Nebraska did not prove superior to other supplements.

In horse feeding we need pay little attention to the quality of protein. Merely timothy hay and oats provide an excellent ration for work horses. In feeding brood mares more attention must be paid to providing an ample supply of an adequate quality of protein, and the same is true in the case of growing colts.

This whole question of the importance of quality of protein in livestock feeding is so new that we may expect much more information as a result of careful experimentation during the next few years. It seems logical to expect that gradually we will discover specific combinations of feeds which are somewhat more efficient than those which have been commonly used in the past in feeding the various classes of livestock.

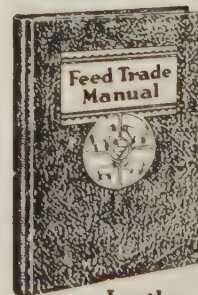
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### Coarse Grinding Is Sufficient for Cattle and Hogs

Coarse grinding of grains is most profitable in feeding cattle and hogs, according to experiments at the Wisconsin Experiment Station.

Figuring tractor power at 5 cents per horsepower hour it cost 2.28 cents to put 100 lbs. of barley thru a 3/16th inch screen; 8.1 cents to put it thru a 1/16th inch screen. Costs on grinding other grains varied from these, but in each case the difference in cost between coarse and fine grinding was in increasing ratio.

From the standpoint of feeding cattle and hogs the Wisconsin experiment indicated no advantage from fine grinding. On a ration including coarse ground barley dairy cows gained .44 lb. per head per day; on the same ration, but including fine ground barley, the cows gained .12 lb. per head per day.

Those receiving the coarse ground barley consumed a little less feed and gave slightly more milk per day over those receiving the fine ground barley, at the same time relishing their feed better. Similar results were obtained from cows on summer pasture receiving supplements including ground barley.

Pigs, both in dry lot and pasture, being fed barley and a protein supplement containing a small proportion of tankage, demonstrated profit from grinding barley, but made no appreciable distinction between coarse and fine grinding.

### Adulterations and Misbrandings

**The Lamar Alfalfa Milling Co.,** Lamar, Colo., shipping alfalfa meal into Indiana about Dec. 15, 1930, was alleged to have labeled the product "Protein 20.0%," tho it contained a smaller percentage. Claimant failed to appear and the court ordered the product sold.

**Consolidated By-Product Co.,** Philadelphia, Pa., was alleged to have shipped 50 bags of beef and bone scrap to Dagsboro, Del., about Mar. 29, 1930, labeled to contain 50% protein, said to be misleading in a libel filed in the District Court. Claimant permitted the product to go by default, and the court ordered it destroyed.

**Norfolk Tallow Co.,** Norfolk, Va., was alleged to have shipped quantities of meat scraps into Georgia about Oct. 6, 1926, and into Florida about Jan. 10, 1927, which contained less protein and more phosphoric acid than was declared on the labels. A plea of nolo contendere was entered on behalf of the defendant and a fine of \$25 imposed.

**Rose City Cotton Oil Co.,** Little Rock, Ark., shipping a quantity of cottonseed meal manufactured by the Chickasha Cotton Oil Co., Chickasha, Okla., about Mar. 29, 1930, from Arkansas into Kansas, pleaded guilty to an information that the product contained less than the guaranteed 43% protein, and fell below the declaration of "100 lbs. Net" imprinted on the bags. The defendant was fined \$100.

**The Hogg Co., Inc.,** Philadelphia, Pa., was alleged to have shipped 225 bags of chick meat and bone meal to Fulton, N. Y., about Aug. 8, 1930, mis-branded in that the product contained less than the guaranteed 55% protein on the label, in a libel filed in the Northern District of New York. Product was released to F. G. Ludington & Sons, Fulton, N. Y., appearing as claimant, on execution of bond and agreement to relabel to show the protein content at not less than 45%.

**John Guitar** (Continental Oil-Cotton Co. and Continental Cotton Oil Co.), Colorado, Tex., pleaded guilty to a charge of shipping misbranded cottonseed meal and cake into Colorado and Nebraska on several dates in November and December, 1928, also a quantity of the same products into Kansas about Nov. 8 the same year, under his company names. Samples were found to contain less protein than that declared on the label. Defendant pleaded guilty and was fined \$175.

**Molo Feed Mills,** St. Paul, Minn., was alleged to have shipped 150 sacks of Molo dairy feed into Wisconsin on Sept. 2, 1930, which was labeled to contain not less than 16% protein and was found to contain a smaller amount as well as more than the labeled maximum of 12% fibre. F. A. Tuschen, Sun Prairie, Wis., appearing as claimant, obtained release of the product on execution of bond and agreement to relabel to show not less than 14 1/2% protein and not more than 15 3/10% fibre.

### Dairyman and Feed Man, Maintaining Quality, Holds Customers

By GEORGE A. GUE, *Everett, Wash.*

Right now milk wars are causing distress among dairymen at various points in Washington, the warring individuals and companies leaving milk at the consumer's door for 6 and 7 cents a quart. This forces the little fellow, with small capital to drop out of business, or adulterate his milk to save himself from bankruptcy.

Jack Lusher, a Swiss dairyman with a beautiful home on a 400 acre dairy farm a few miles from Portland, Ore., selling his milk on a dairy route as so many lone operators do, just sits tight, while the war is on, continuing to sell his milk at 12 cents a quart, telling his customers to stay by him for the sake of high quality and the friendly cooperation that is so necessary these days between consumer and producer.

Uncle Jake, as he is familiarly known, has lost not a single customer. On the contrary, consumers who were being served by others, becoming disgusted with the effects of the food produce war, have come to Jake to such an extent that he is unable to produce the volume demanded, because he has maintained the quality of his milk.

The food produce war and Uncle Jake will find parallels in the feed business. The man who can deliver quality goods, building up a friendly clientele, need have no fear of cut-throat competitors who squeeze the market for personal gain.

Twenty years ago commercial feeds already prepared were unavailable to the dairyman. We had to mix the grain rations ourselves, buying corn, oats, barley, oilmeal or cottonseed meal and blending them together as limited knowledge availed. Today the live-wire feed man prepares a dependable, thoroughly mixed and balanced food, carrying sufficient quantities of necessary protein, and selling it at a price so little over the cost of home mixing that home mixing is unprofitable. Besides, the average grinder and mixer has much more efficient facilities for thorough blending than is available to the home mixer, and it is on such better feeds that the high records in butterfat production are made. The same is true of poultry feeds.

Even in these trying times when the price

of milk and eggs are way below what they should be the dairyman and the poultry man who does a good job of feeding to high producing cows and high producing hens is getting a profit. This is the kind of fellows who are still buying feed. If there is one thing that the grain and feed men can do to promote their own interests to better advantage it is promote culling of dairy herds and laying flocks so that the farmers they serve can make a profit which will permit them to buy feed.

We used to think a 250 lb. cow was a good producer. Today there are entirely too many in this class. The cow that is not producing 350 lbs. or better of butterfat per year is only taking her owner into bankruptcy.

I know of one grade herd of 35 cows that are averaging over 680 lbs. of butterfat per cow per year. It costs little more to feed its individual members than it does those in herds averaging less than 300 lbs.

Today we can buy fine sires at almost butcher prices, sires whose female offspring, freshening with second calf, would produce 500 lbs. of butterfat per year if properly raised. In five years any intelligent dairyman in this state can build up a herd to average 500 lbs., almost doubling the average income with little increase in costs of production.

These days of over-production would seem propitious to rid the herd of boarder cows. If such cows were sent to the butcher it would not be long before demand would exceed supply, and the dairymen could enjoy good profits from high producers; the feed men could enjoy selling larger quantities of feed to men who could pay their bills.

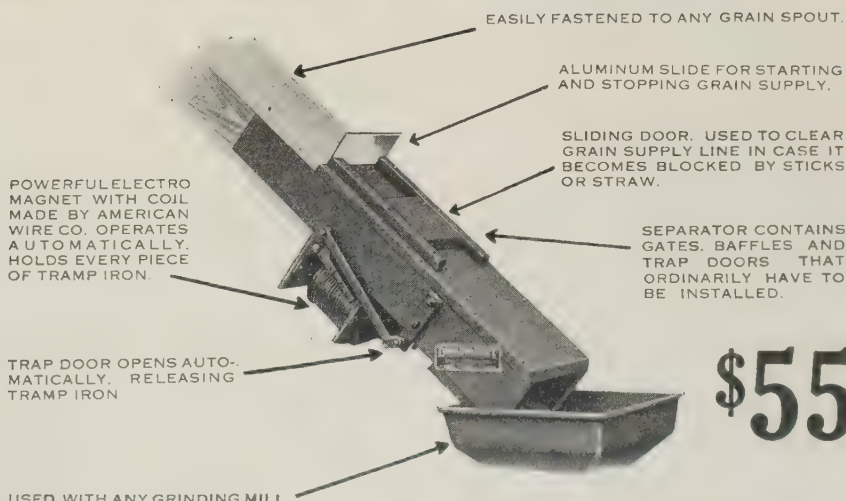
Feed is the greatest essential in raising young stock to maturity. The stunted calf will never make a profitable cow, any more than the squealing pig will make good bacon. After maturity it takes feed to keep up production.

### A 20% Dairy Feed

The Extension Feed Service of the New York State College of Agriculture suggests for a 20% protein dairy feed:

**Mix:** 500 lbs. wheat or barley, 300 lbs. bran, 400 lbs. oats, 400 lbs. gluten feed, 100 lbs. linseed meal, 300 lbs. cottonseed meal. The grains should be ground.

## DREADNAUGHT Electro Magnetic Separator



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# Poultry Feeds and Feeding

## Eggs and Exports

The latest report of the Department of Commerce, showing the tremendous drop in exports of eggs and poultry products from this country to the world markets during the past year may shed some light on the low prices of these products.

There was a decline of 58% in the exports of eggs in the shell in 1931 as compared with 1930, exports amounting to 7,683,609 dozen. Argentina is the largest market. Exports to Mexico have constantly declined for several years and amounted to only 175,728 dozen in 1931 as compared with 3,865,467 dozen in 1930. Shipments to Cuba have likewise steadily declined and reached 104,228 dozen in 1931 as compared with 1,471,637 dozen in 1927. For several years exports to Chile increased until they reached 222,748 dozen in 1930, then dropped to 144,330 dozen in 1931. Exports to Peru also increased to 179,160 dozen in 1930, then decreased to 15,000 dozen in 1931. Honduras is also a good market for eggs. Panama is the second largest market for United States eggs in the shell, and exports to that country in 1931 were the largest for many years. Exports to the Bermudas were also the largest for many years. Shipments to Venezuela have steadily increased since 1927.

There can be no question but foreign demand has fallen off to some extent and that American products are meeting stiffer competition in world markets from production in other countries.

Eggs and poultry quickly respond to the law of supply and demand. The ramifications of the industry are so interlaced with other industries that they in turn are soon affected. Only foolhardy, misguided politicians would dare to meddle with the complex set-up, and the results are manifest in wheat.

## Poultry Income in February About Half Last Year

Calendar record flock owners realized about one-half as much income from sale of hatching eggs in February as in the same month a year ago, according to the monthly report of Iowa calendar poultry flocks just released by Iowa State College.

Last month calendar flock owners received an average of 2.8 cents per hen from sale of hatching eggs as compared with 6.7 cents a year ago.

Average production per hen was 9.6 eggs as compared with 11 a year ago. Average price for market eggs received by the flock owners was 11.4 cents per dozen as compared with 12.5 cents in 1931.

The 10 high producing flocks had a margin per bird of slightly more than 9 cents, while the 10 low producing flocks managed to make expenses with a margin of about 2 cents per bird.

## Ground Corn Cobs Make Baby Chick Litter

Several Nebraska poultrymen report that they are using ground corn cobs for brooder house litter. When the cobs are ground coarsely the material seems to be as satisfactory as straw or chopped hay for litter. Other poultrymen like chopped alfalfa hay better than any other litter and many people think fine wheat straw is satisfactory. It is advisable to cover the floor around the brooder stove with about an inch of sand, but the sand does not make a good floor covering unless the chicks are well fed all the time. If baby chicks are placed on sand and allowed to pick at it instead of feed, they will fill up on the sand, get indigestion, and probably die.

Possibly Corn Belt grain and feed dealers can utilize a part of the corn cobs that are ordinarily given away or burned, by running

them thru a grinder, transforming them into baby chick litter.

## The New England Laying Ration

Maintaining winter egg production is a problem of feeding fully as much as housing. Hens are willing to do their share, but they cannot produce without the proper materials. The New England laying ration offers plenty of variety in ingredients to supply the needs of layers. It is:

Scratch Grain	
Ingredient	lbs.
Cracked or whole corn.....	500
Wheat .....	250
Barley .....	150
Heavy oats (38 to 40 lbs.).....	100
Mash	
Coarse yellow corn meal.....	200
Wheat bran .....	100
Flour middlings .....	100
Ground oatmeal (or ground heavy oats).....	100
50% protein meat scrap.....	25
50% protein fish meal.....	25
Alfalfa leaf meal.....	25
Edible steamed bone meal.....	25
Dried skim milk or buttermilk.....	25
Fine salt .....	5

The meat scrap and fish meal protein minimums are 50%.

The alfalfa leaf meal should not carry more than 20% fibre, preferably less.

## Unmixed Feeds Move to Sales Outlets in Ohio

While the entire trend of sales of feed-stuffs in Ohio moved downward from 1929 to the close of 1931 due to reductions in feeding programs, the report of V. R. Wertz at the Ohio Agricultural Experiment Station, indicates further change in the character of the feed business, and feeding practice.

The total tonnage of all commercial feeds, including dairy, poultry, hog, and other mixed feeds, and cottonseed meal, linseed meal, bran, middlings, alfalfa meal, gluten feeds, hominy, tankage, meat scraps, milk products and others unclassified in the list of unmixed feeds reaching the retail trade, was 679,518 tons in 1929. Of this total 56.7% was mixed feeds, 43.3% unmixed. In 1930 the total tonnage dropped to 575,570, the percentage changed to 50.3% mixed feeds, 49.7% unmixed. During 1931 another drop was shown in total volume to 410,104 tons, with further change in relationship to 42.6% mixed feeds, 57.4% unmixed.

The most marked change was registered in sales of ready-mixed hog feeds, which last year registered 79.2% less than in 1929. This was followed by dairy feeds which showed volume reduced by 55.7%, and poultry feeds which showed 52.4% less. The total drop in mixed feed of all characters was 54.7%.

Loss was likewise registered by unmixed feeds, tho to a much smaller extent, 20% less being recorded in 1931 than in 1929.

Alfalfa meal, tankage and meat scraps recorded sharp gains in volume. The increase was 12.1% over 1929 for alfalfa meal, 25.3% for tankage, 27.4% for meat scraps. Among the most marked reductions in use of unmixed feed was cottonseed meal with 17.9%, middlings with 23.8%, hominy with 44.5%.

Indicators in the livestock industries point to an upward trend in pig and poultry population. Packing house prices for hogs have shown greater firmness recently, and while country prices on eggs at present are at a low level so are feed costs. Milk wars are damaging the dairy men but trade wars do not ordinarily last long and it is to be expected that culling of herds, improving feeding of high producers, will soon return a profit to this division of the industry.

## Wisconsin All-Mash Chick Ration

The Wisconsin all-mash chick formula, made up of 80 lbs. finely ground yellow corn, 20 lbs. wheat middlings, 5 lbs. bone meal, 5 lbs. pearl grits (calcium carbonate), and 1 lb. common salt, has proven highly satisfactory when fed with all the skimmed milk the chicks will drink. No water or greens are provided when this ration is used, as it is intended to force the chicks to drink a great deal of skimmed milk to make up for the small proportion of animal protein in the mash.

If skimmed milk is unavailable at least 5 lbs. of dried buttermilk or dried skimmed milk should be added to the mash. If the chicks are raised in confinement they also need addition of a pint of tested vitamin D fish oil to each 100 lbs. of the mixture.

Another all-mash formula used for developing baby chicks, especially for broilers, is 70 lbs. of fine ground yellow corn, 20 lbs. winter wheat middlings, 5 lbs. 50% protein meat scrap, 4 lbs. raw bone meal, 1 lb. common salt. This should be fed with only skimmed milk or buttermilk for drinking during the first 10 weeks to three months, by which time broilers should be ready to market. Crushed oyster shell or other suitable forms of calcium carbonate should be kept before the birds constantly, and suitable portions of green feed are helpful. Good vitamin D fish oils are needed to replace sunlight if the latter is unavailable.

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# Poultry Feeding Nutrients

By WALTHER F. HOLST and WILSON E. NEWLON, University of California

Production of eggs and market poultry is transformation of comparatively cheap feeds into high-priced products for human consumption. The fowl's body is the agent which effects this transformation. Poultry feeding should be based on the food requirements of the birds, the nutritive value of the different feeds, and a knowledge of how to use these for a particular purpose.

Food is composed of several distinct groups of substances, called nutrients. Of these proteins, carbohydrates, fats, vitamins, minerals, and water are recognized.

**PROTEINS** is the name of a group of complex organic substances containing carbon, hydrogen, oxygen, and nitrogen. In addition, proteins usually contain sulfur and frequently phosphorus. These substances are widely distributed, both in plants, which build them from simple sources in soil and in air, and in animal tissues, which must derive them directly or indirectly from plant tissues. The thousands of different known forms vary widely in character but have two characteristics in common: they all contain nitrogen in a fairly definite proportion (approximately 16%) and all are composed of certain simpler building stones, the amino acids.

A bird's body contains as much protein as all other groups of nutrients together, if water is excepted. Twenty per cent of the live weight and practically 50% of the dry weight is protein.

Of the amino acids which form the proteins, about twenty are known. Certain of them are more important in feeding than others, because some, such as tryptophane, lysine, and cystine cannot be built up by fowls from other amino acids, while certain others, such as glycocol, can be formed in the body from the excess of other amino acids present.

If protein is provided in excess of requirements, the amino acids are formed and absorbed by the blood as usual. In the liver, however, they are deprived of nitrogen, and transformed into one or both of two other classes of nutrients, carbohydrates and fats. The fate of the tissue protein after it is worn out is similar. It is broken down and deprived of its nitrogen, and the remaining part utilized in the animal body.

The nitrogenous part of excess protein in feeds is wasted, but the rest is used as carbohydrates or forms fats. While protein can thus replace carbohydrates or fats to a certain degree, the reverse is impossible, because these nutrients do not contain nitrogen and are incapable of taking it up. A lack of protein in a chick ration will retard growth, as a lack of protein in a laying ration will retard production.

**CARBOHYDRATES** contain only three chemical elements: carbon, hydrogen, and oxygen. The last two nearly always appear in the same proportions as in water, the name carbohydrates means carbon-water. The carbohydrate group includes the starches, sugars, pentosans, and celluloses. The celluloses are generally classed separately as 'fiber' or 'crude fiber,' in tables giving the composition of feeds. Crude fiber is largely indigestible for poultry.

In the course of digestion the carbohydrates are broken into the simplest sugars, the so-called monosaccharids, in which form they are absorbed. The monosaccharids readily combine with oxygen (which is absorbed from the lungs by the hemoglobin of the blood); they are thus oxidized (or burned) to carbon dioxide and water with the production of heat. Upon this heat

liberation, as already mentioned, the life processes of birds are dependent.

The liver is the regulator of the carbohydrate supply. It stores excess sugar gives it up to the blood, which distributes it to the different body parts according to demand.

**FATS** are compounds of an alcohol (usually glycerin) and the fatty acids (commonly, stearic, palmitic, and oleic acid). Like carbohydrates they contain only carbon, hydrogen, and oxygen. They differ from carbohydrates in that oxygen is contained in much smaller proportions. (Starch and sugars contain between 49.4 and 53.3%; fats about 11.0%.)

In the digestive tract fats are digested to free fatty acids and glycerin, which pass through the intestinal wall, immediately to be recombined into fats. These are taken up by the lymph and passed on to the blood in suspended form. The fats are used for energy purposes, probably being first transformed into sugars, which then combine with more oxygen, producing heat, carbon dioxide, and water. If not needed immediately as a source of energy they are deposited within the cells and in the fatty tissue.

Since the storage places for carbohydrates, the liver and muscles, soon become loaded to their limit, a transformation process changes excess carbohydrates into fats. Carbohydrates, therefore, produce body fats, and fats under certain conditions are transformed back to carbohydrates. Approximately one part of fat yields as much heat or energy as two and a quarter parts of carbohydrate.

In fattening poultry and other domestic animals, not fats but carbohydrates, are fed in excess. This is because carbohydrates even in large quantities are very easily digested, absorbed, and transformed into fat. Fats, on the other hand, are digested only with difficulty, and are absorbed slowly. Large proportions of fat in the food may retard digestion and upset the normal metabolism of the other nutrients. The amount that birds can make proper use of increases with the exercise they have and with the coldness of the weather to which they are exposed.

**VITAMINS:** There are five known members of this group of nutrients, called by the first letters of the alphabet, A, B, C, D, and E. Investigations indicate others, but not enough is known of them to warrant discussion. Vitamins are characterized by lack of proportion between their great importance in nutrition and the extremely small quantities in which they are normally required.

It is so far unknown whether the vitamins are actually building stones (structural components) of the body, or whether they are simply catalysts (accelerators) which speed up certain essential body processes. It has been found, however, that if certain very small, indeed minute, parts are removed from an otherwise complete ration, this ration fails to support life adequately. If they are withdrawn for any length of time, the result is deficiency disease and eventually death. Such failure may be prevented or health may be restored if these small parts, which were withdrawn from the adequate ration, are again added to it.

Unlike the other classes of nutrients, which are very stable chemical compounds, the vitamins are more or less unstable. Because of this care must be taken to insure an adequate supply in poultry rations. When the individual needs have been covered an

excess can in certain cases be stored in the tissues. A supply of any of these vitamins beyond that which is needed and can be stored, is either destroyed or excreted. In no case has benefit from excess been demonstrated.

**MINERALS:** The bird's body also contains minerals, found not only in the skeleton but, in smaller proportions, in all organs, tissues, and fluids of the bird's body. It is evident that growing birds need a constant supply of minerals so that they may form new bone and other mineral-containing tissue. Just as evident is the necessity of providing laying birds with the essential minerals for egg-shell formation, and repair of tissue.

The parts played in metabolism by various minerals are little known. Calcium and phosphorus are needed for bone formation; calcium for shell formation. Calcium is an important constituent of the blood, necessary to coagulation (clotting). Calcium is a constituent of the white of egg and of the phosphates of egg yolk.

Sodium is needed by all plant-eating animals, because it is necessary for the elimination of the excess of potassium contained in the feed. Chlorides of sodium and potassium are constituents of the body fluids and tissues.

Iodine is required in small quantities, and is abundant in the thyroid gland. Silicon and sulfur are constituents of the feathers. Iron appears in eggs and is a constituent of [Concluded on page 310]

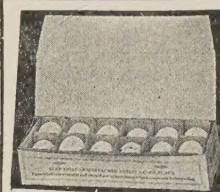
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## Sales Effort Brings Returns to Small Feed Plant

The aggressive sales effort of G. H. Anda and the careful workmanship of W. R. Madison combined with the alertness of both to new ideas for getting business, turned a failing grain and flour business into a thriving grinding and mixing plant where poultry and dairy feeds are manufactured for distribution thruout the county.

Development of dairying and the poultry industry has steadily improved the feed business of the West Chicago Flour & Feed Co. at West Chicago, Ill., since 1927, while local flour business slowly drifted backward until the flour machinery was closed down in 1930. Saving the business with the development of grinding and mixing of feeds was by no means automatic. It took strenuous work on the part of both principals in the company.

The plant had been equipped with a ham-



G. H. Anda and W. R. Madison  
of West Chicago, Ill.

mer mill and had done local feed grinding for a number of years while still engaged in local milling of flour. The principals foresaw the growing demand for local mixing of feeds and were willing to work to develop it. Mr. Anda says:

About 3 years ago we decided that a feed mixer would work well in our business along with flour milling and custom feed grinding. The demand for mixing and the possibilities in poultry feeds looked good to us. So we installed a mixer, set to work studying formulas and feed ingredients, and visited the trade that would consume the completed feeds we turned out. Today we have a 2-ton mixer for dairy feeds in our plant, supplemented by a 1-ton for scratch feeds and two 1-ton machines for poultry mashers. Our feed business has grown materially.

Other machinery in the plant includes a Monarch corn cutter, an aspirator, a scouring machine, screw conveyors, 4 legs, wagon scales, sacking scales, and other equipment arranged to handle grain and ingredients to and from machines and bins with a minimum of manual labor. Each of the machines is fitted with an individual Westinghouse motor, except that one mixer, the corn cutter, the aspirator, and the scouring machine are run from a line-shaft, driven by one 7½ h.p. motor. The plant is 3 stories high, gravity feed from its numerous bins may be easily directed to desired machines.

Active pushing of the feed business began in 1929. Next to the building and preparing of good formulas this was undoubtedly one of the biggest factors in the success of the institution. Mr. Anda had spent a number of years as a salesman for a large feed manufacturer and bent his experience to gain by personal contact with the dairy and poultry farmers of the trade territory. The feeds made good and patronage grew until feed

was being sold thruout the country. Mr. Anda has consistently kept up his visits to the farms of prospective customers ever since. They like to see him come, because he is not only experienced in feeds, but operated a poultry business for a number of years and is familiar with the treatment of poultry troubles, sanitation, ventilation and other factors that reduce the profit from this industry.

Something of the alertness of the individuals who carry on the business is reflected in an early plan developed and followed by Mr. Madison when the flour milling machinery was still in operation.

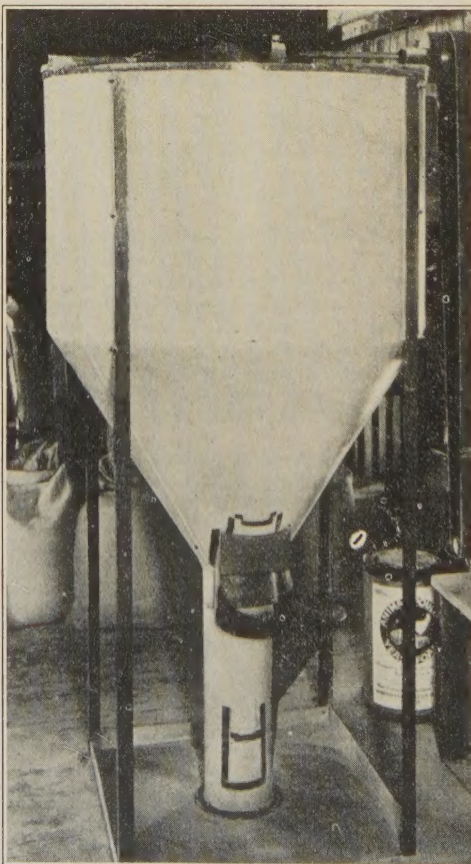
Teachers in the local high school were seeking funds to buy a piano. The flour business was a little slow. Mr. Madison got on the phone and called the principal. "Do you want \$50 toward the purchase of a piano?" he asked.

"Do we want it! Of course we do."

"Well, I'll send over a bunch of order blanks, stamped to indicate they come thru you. You turn these over to the youngsters concerned and for every order for a barrel of flour that comes in thru this source I'll pay 50 cents to your piano fund."

The plan was accepted and worked so well that in almost no time at all Mr. Madison had orders for 108 barrels of flour and had paid to the piano fund \$54.

This is matched by a more elaborate plan conceived by Mr. Anda. It contemplates giving a free record form to every farmer in the trade territory to be accurately kept for a period of three or more months. At the close of the contest period prizes would be awarded for the record showing the least mortality, for the quickest birds to market,



A Du Page Feed Mixer at West Chicago, Ill.

for the most eggs per hen for the period covered, for the earliest laying pullet and other factors. The records would have to be turned in as proof.

"Can you think of any better testimonial to the feeding value of Du Page feeds," he asks, "than the signed records of the feeders?"

Up on its toes, the company is still expanding increasing its output as the business grows.

### Poultry Feeding Nutrients

[Concluded from page 309]

the hemoglobin which is the chief oxygen carrier of the blood. Besides these, copper, zinc, and arsenic are found in small quantities. Requirements are small because the body waste is inconsiderable.

Minerals aid digestion, absorption, distribution, and excretion. Birds can stand starvation from organic nutrients, commonly considered most important, longer than they can stand mineral starvation. Each particular mineral has one or more specific functions in the organism, a deficiency of any one causes disease.

Altho the organic nutrients, when fed in excess, are stored in the body, such is not the case with minerals. Whatever is not needed for immediate use by the body is soon disposed of thru excretion. Their supply must be continuous.

WATER is an important structural component, necessary agent in practically all body processes, which are chemical reactions between substances in a liquid medium.

The fowl's body is continuously losing moisture thru expired air and excretions. Laying birds lose additional moisture thru formation of eggs. The water formed in the body by oxidation of organic nutrients does not cover more than a small fraction of actual needs. With increasing external temperature the need for water is increased, because of increased evaporation thru the lungs, the bird's principal means of temperature regulation. Water is accordingly looked upon as an essential nutrient, which should be before the birds at all times.

In practical feeding it is not the separate nutrients with which the feed man and the feeder deals, it is the mixtures of them. Nutrients are seldom available in pure form, they are "crude proteins," "crude fats," etc., and the form in which they are present have much to do with their digestibility and their feeding value.

Understanding of the individual characteristics and behavior of the nutrients is of immediate importance to the mixer and seller of compounded feeds. Knowing what is essential and what is beneficial is of first importance in supplying the compounded needs of birds.

### Soybean and Cottonseed Meal Fertilizer

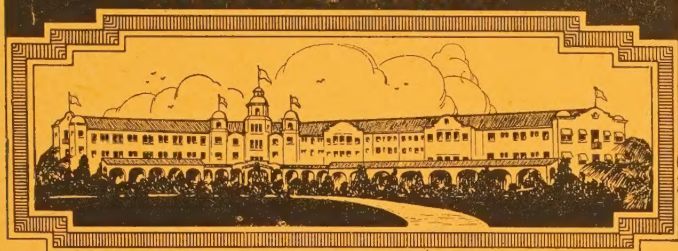
The low prices prevalent on soybean and cottonseed meals and the heavy supplies burdening the feed market, is leading to sundry suggestions and sales efforts in the fertilizer field. In many foreign countries, where thrifty people utilize everything possible to best known advantage, these meals are commonly used as fertilizers.

Average fertilizing constituents recognized in soybean meal run about 7.28% nitrogen, 8.80% ammonia, 1.58% phosphoric acid, 2.68% potash. Cottonseed meal shows about 6.79% nitrogen, 8.24% ammonia, 2.88% phosphoric acid, 1.77% potash.

Where many home owners take pride in the well-kept appearance of their lawns and the productiveness of backyard gardens sales efforts directing these meals to fertilizing purposes may prove profitable.



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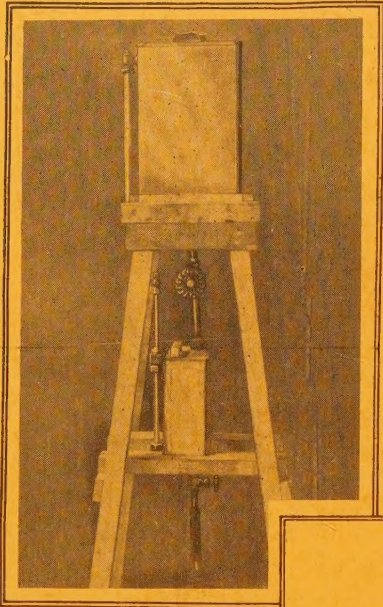
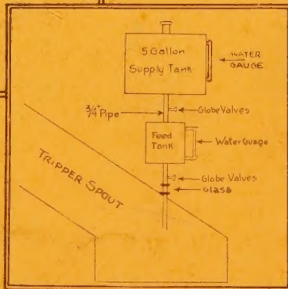


PHOTO OF EQUIPMENT  
AND WORKING DIAGRAM

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The equipment used is illustrated at the left. It was built by the elevator Company's mechanic at only a slight cost. Two pounds of Larvacide to each 1,000 bushels of Hard Winter Wheat were allowed to trickle into the grain stream as it passed through the elevator spout. 72 hours later the wheat was inspected and showed a 100% kill as reported by the Chief Grain Inspector and verified by the Bureau of Entomology representatives.

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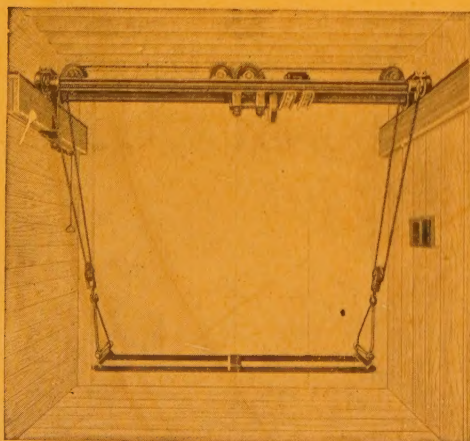
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